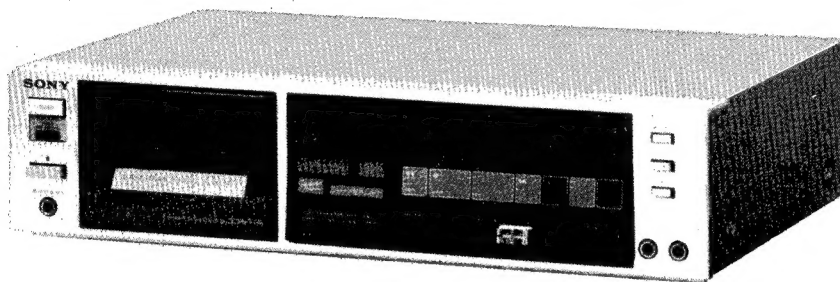


US Model
 Canadian Model
 AEP Model
 UK Model
 E Model



'Dolby' and the double-D symbol are the trade marks of
 Dolby Laboratories Licensing Corporation. These non-patented
 system manufactured under license from Dolby Laboratories
 Licensing Corporation.

STEREO CASSETTE DECK

SPECIFICATIONS

Recording System: Compact Cassette Stereo

Bias Frequency: 105 kHz

Head: Erase head x 1 (F & F head)
 Record/playback head x 1 (LA head)

Motor: Reel motor x 1 (DC motor)
 Capstan motor (DC servo motor)

Wow and Flutter: $\pm 0.06\%$ W. Peak
 0.04% W. RMS (NAB)
 0.04% W. RMS (DIN)

**Fast-forward and
 Rewind Time:** Approx. 90 sec. (with C-60 cassette)

Frequency Response:

DOLBY NR OFF

- With TYPE IV cassette (Sony METALLIC)
 30–17,000 Hz ± 3 dB
 30–13,000 Hz (± 3 dB, 0 VU recording)
 20–19,000 Hz
- With TYPE III cassette (Sony DUAD)
 30–17,000 Hz ± 3 dB (NAB)
 30–17,000 Hz ± 3 dB (DIN)
 20–19,000 Hz
- With TYPE II cassette (Sony UCX)
 30–16,000 Hz ± 3 dB (NAB)
 30–16,000 Hz ± 3 dB (DIN)
 20–18,000 Hz
- With TYPE I cassette (Sony BHF)
 30–15,000 Hz ± 3 dB (NAB)
 30–15,000 Hz ± 3 dB (DIN)
 20–17,000 Hz

— Continued on page 2 —



SERVICE MANUAL

Signal-to-noise ratio (NAB, at peak level):

| Cassette | Dolby NR switch | | |
|-------------------------|-----------------|-----------|-----------|
| | OFF | B-TYPE-ON | C-TYPE-ON |
| TYPE IV (Sony METALLIC) | 59 dB | 66 dB | 72 dB |
| TYPE III (Sony DUAD) | 60 dB | 67 dB | 73 dB |
| TYPE II (Sony UCX) | 58 dB | 65 dB | 71 dB |
| TYPE I (Sony BHF) | 54 dB | 61 dB | 67 dB |

Total Harmonic Distortion: 1.0 % (Sony DUAD and METALLIC)

Inputs: Microphone inputs (phone jacks)
Sensitivity 0.25 mV
For a low-impedance microphone
Line inputs (phono jacks)
Sensitivity 77.5 mV (50 kΩ)

Outputs: Line outputs (phono jacks)
Output level 0.44 V at load impedance 50 kΩ
Load impedance over 10 kΩ
Headphone output
Output level 0.43 mW at load impedance 32 Ω

Power Requirements: US, Canadian model: AC 120 V, 60 Hz
AEP model: AC 240, 60 Hz
UK model: AC 220, 60 Hz
E model: AC: 110, 120, 220, 240 — 50/60 Hz

Power Consumption: AC 26 W

Dimensions: Approx. 430(w) x 105(h) x 275(d) mm
16⁷/₈ (w) x 4¹/₈ (h) x 10³/₄ (d) inches
including projecting parts and controls

Weight: Approx. 5.5 kg (12 lbs 3 oz)

0 dB = 0.775 V

Tape Transport Mechanism TCM-110V13

FEATURES

Dolby NR C-type noise reduction system

In addition to the conventional B-type Dolby NR system, the TC-FX77 employs the newly-developed C-type Dolby NR system which reduces tape noise twice as effectively as the B-type system. The C-type system also incorporates an anti-saturation network to improve the high-frequency dynamic range by 4 dB at 10 kHz.

Newly-developed LA (Laser Amorphous) head

The record/playback head is made of a special amorphous magnetic alloy developed by Sony, and its cores are solidly welded by laser. This new highly-durable head provides a wider dynamic range and a more extended frequency response, especially in the high-frequency range. The head is designed to take full advantage of the potential of the metal tapes.

Digital linear counter

This counter indicates the recording or playback time elapsed on the tape so that the tape can be precisely indexed. While conventional displays can only indicate the elapsed recording time, this display can indicate with a minus sign how much recording time remains.

Tape programming functions

The AMS (Automatic Music Sensor), Memory, Repeat and Ending Control functions allow you to program the tape deck operation as you desire.

AMS: for locating the beginning of a selection on the tape.

Memory: for easily locating any point on the tape.
Repeat: for repeating any selection any number of times.

Ending control: for stopping the tape after playing a particular number of selections.

Full-logic "feather-touch" operation

At the slightest touch, the "feather-touch" function buttons which control a microprocessor enable you to switch directly from one mode to another without going through the stop mode.

Bright 16 segment peak program meters and wide-scale REC LEVEL (recording level) controls

The peak program meters follow the transient peaks of the music and maintain the peak readings for about 4 seconds. This double indication and the wide-scale REC LEVEL controls make it easy to set critical recording levels precisely.

Timer-activated recording and playback

A timer switch is provided to turn the deck on and off any number of times at preset times determined by an optional timer.

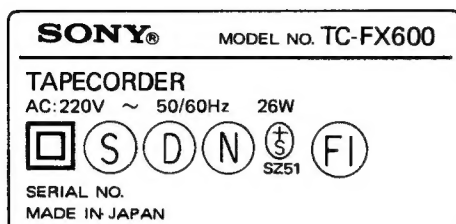
Remote control operation

Using the optional RM-50 or RM-80 remote control unit, various operations—recording, playback, record muting operation, etc.— can be remotely controlled.

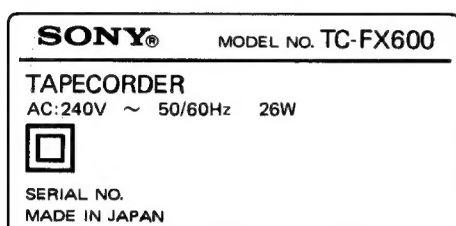
When the RM-65 synchro remote control unit is used to connect this cassette deck with a turntable equipped with a synchro remote control jack or a TC-PB5 stereo cassette player, the operation of the cassette deck and the turntable or TC-PB5 will be synchronized.

MODEL IDENTIFICATION

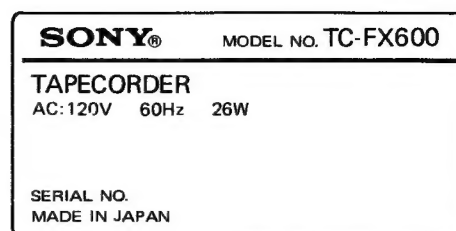
— Specification Label —



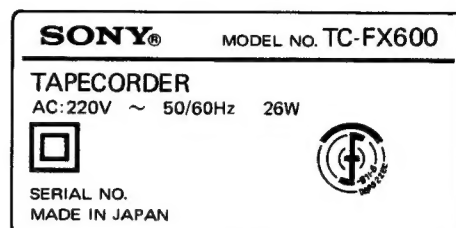
AEP model



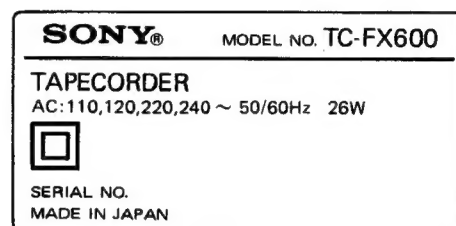
UK model



US, Canadian model



G-AEP model



E model

SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

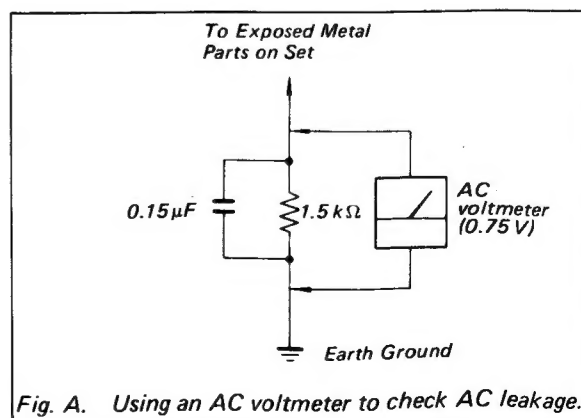
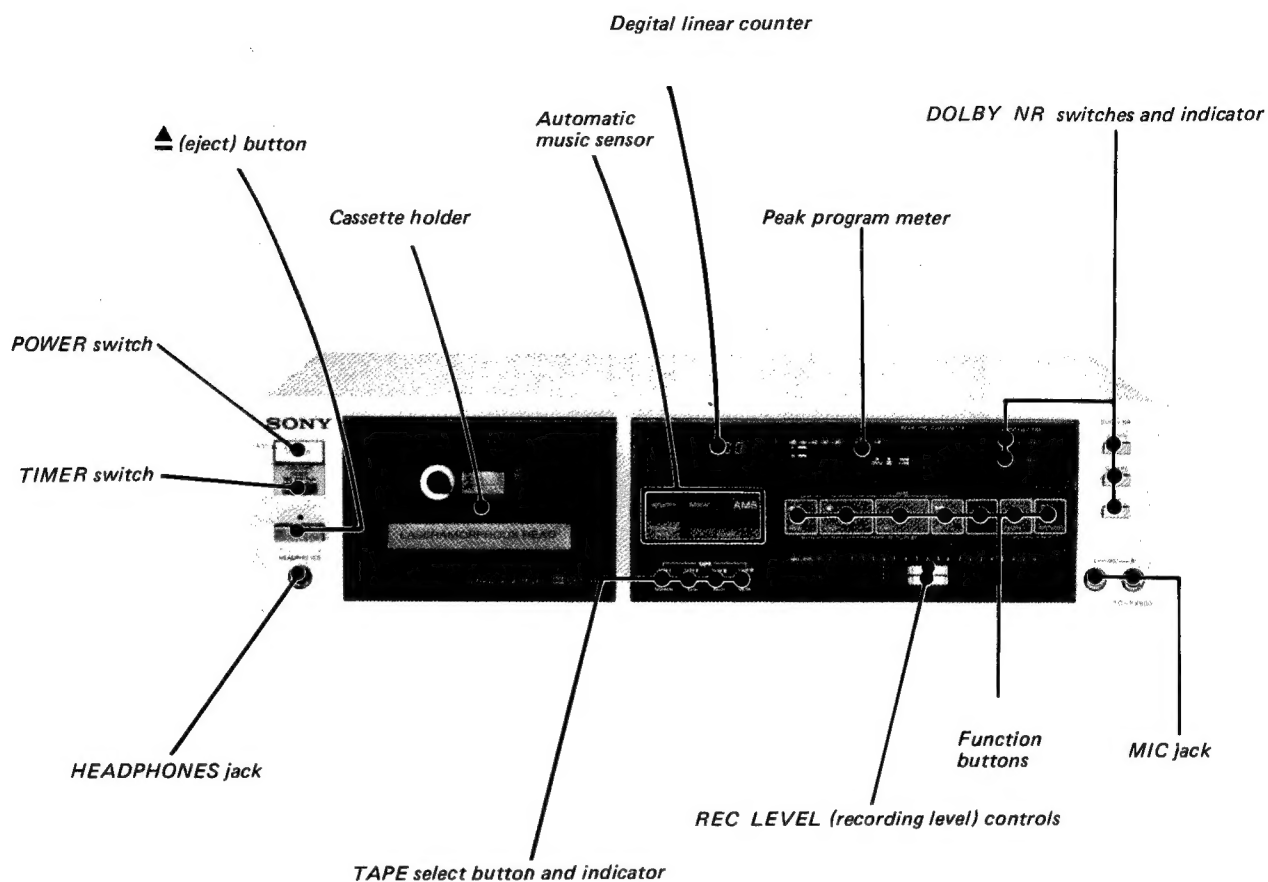


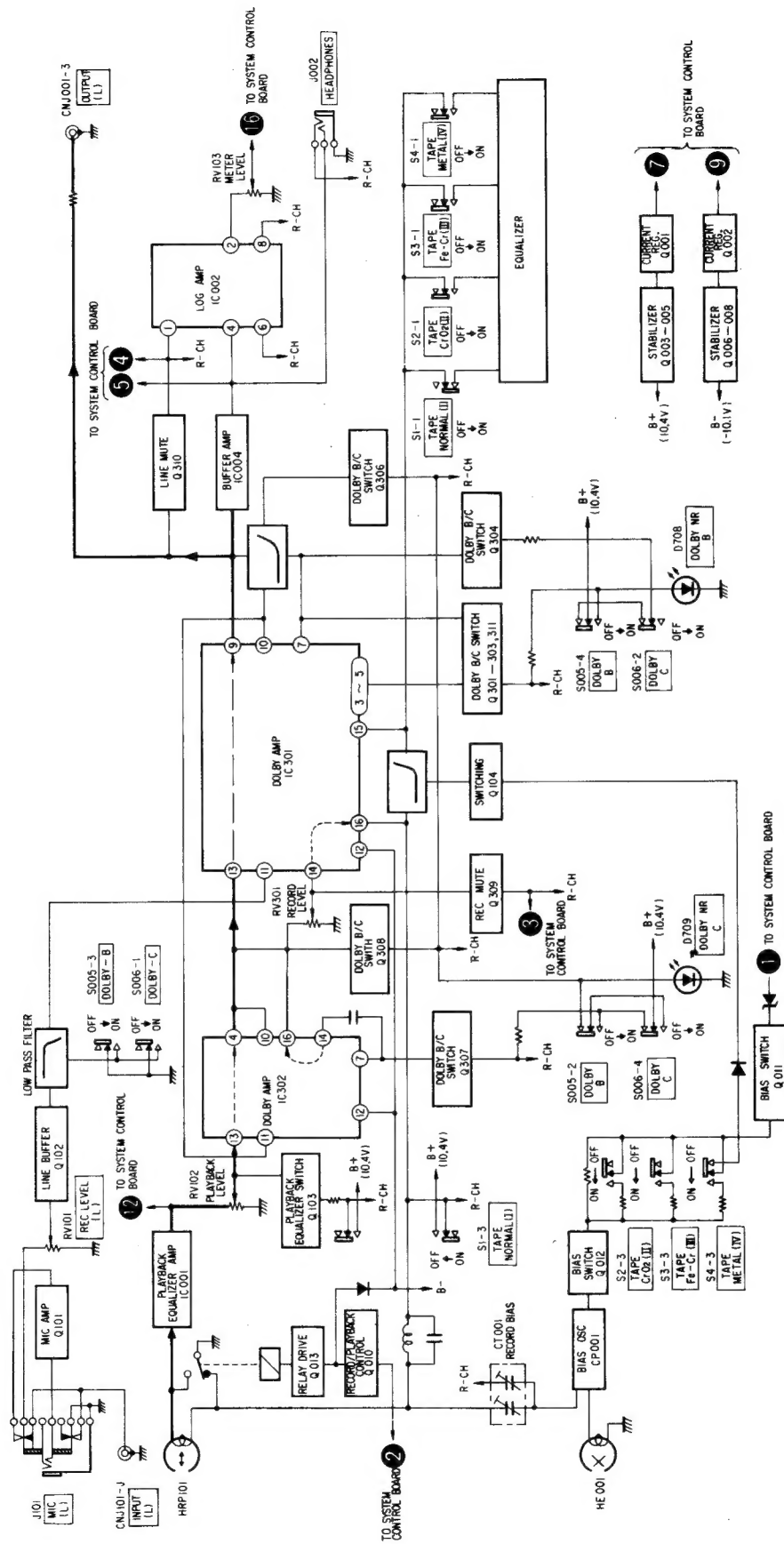
Fig. A. Using an AC voltmeter to check AC leakage.

SECTION 1 OUTLINE

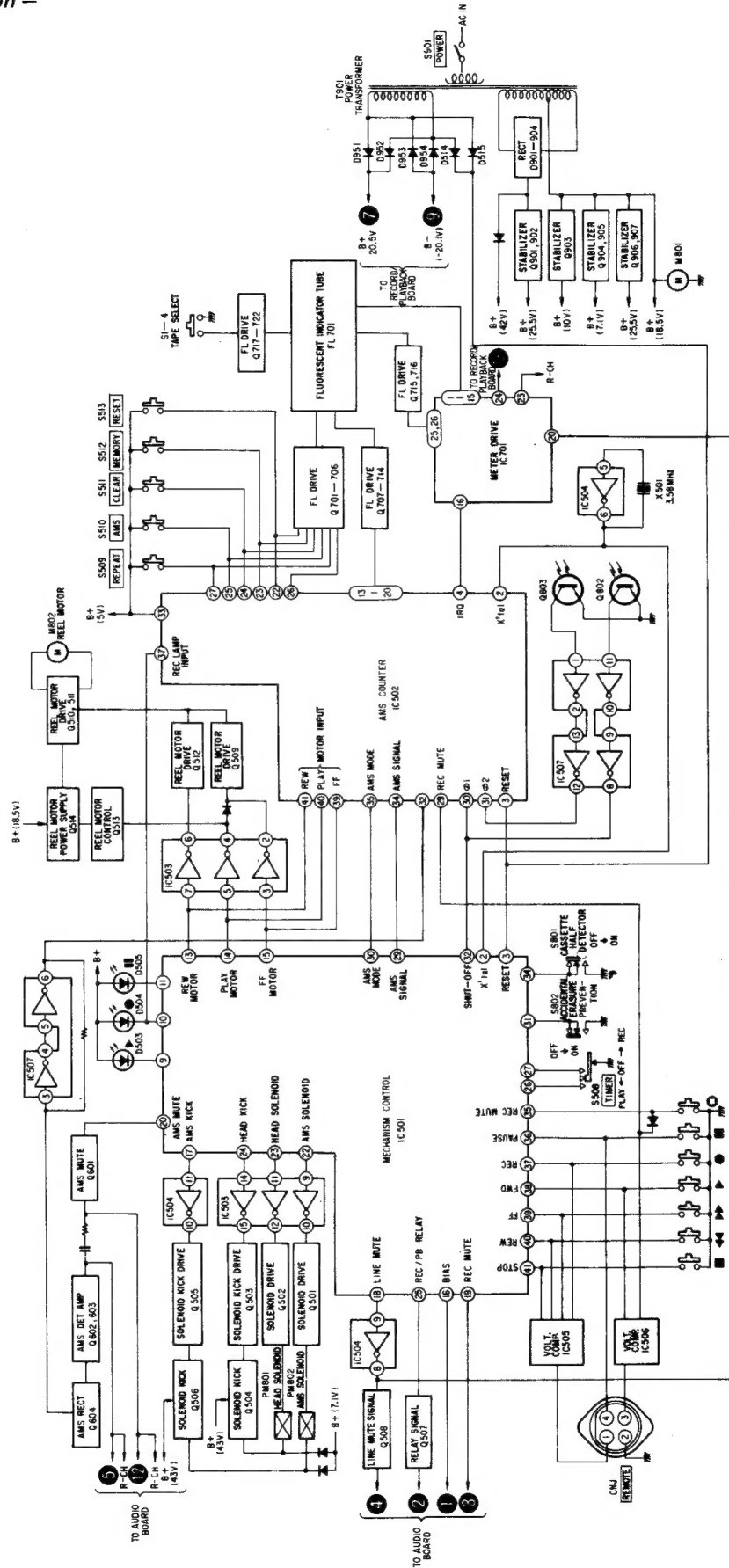
1-1. FUNCTION OUTLINE OF CONTROLS



1-2. BLOCK DIAGRAM — Audio Section —



— System Control Section —

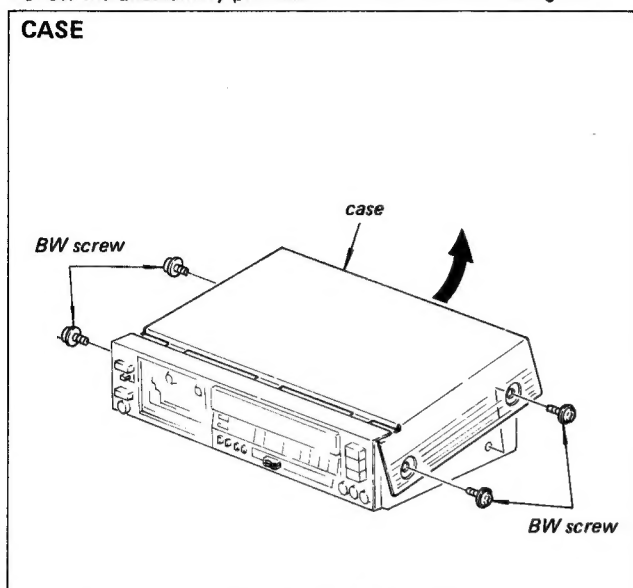


SECTION 2 DISASSEMBLY

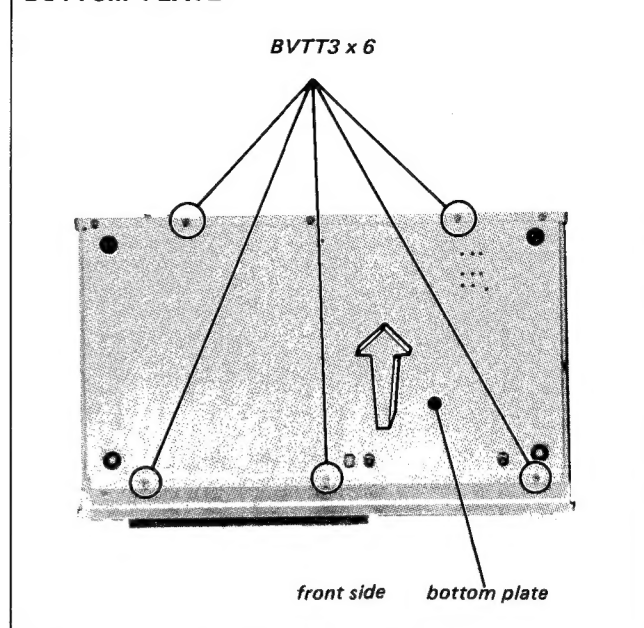
2-1. REMOVAL

Follow the disassembly procedure in the numerical order given.

CASE



BOTTOM PLATE

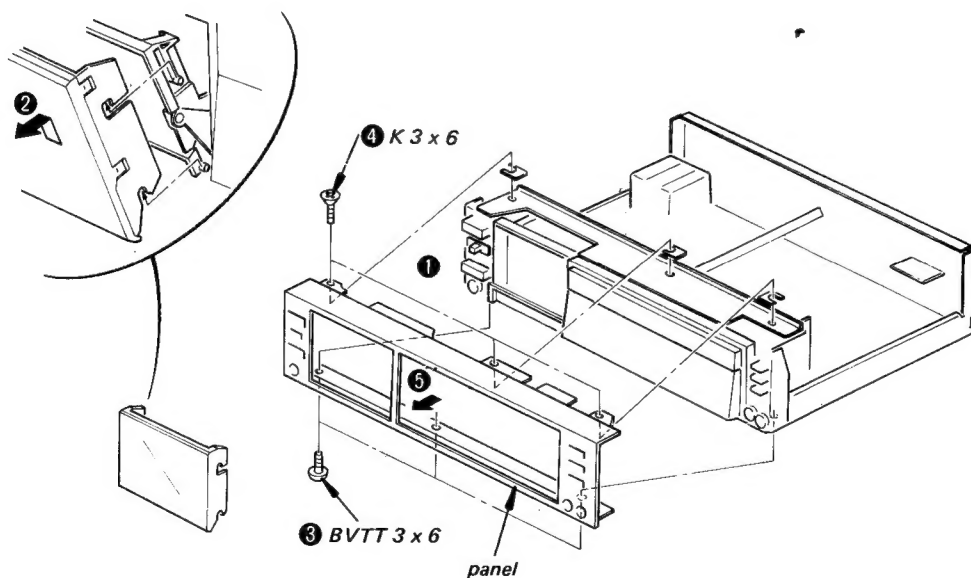


The conductor side of RECORD/PLAYBACK board and SYSTEM CONTROL board can be checked.

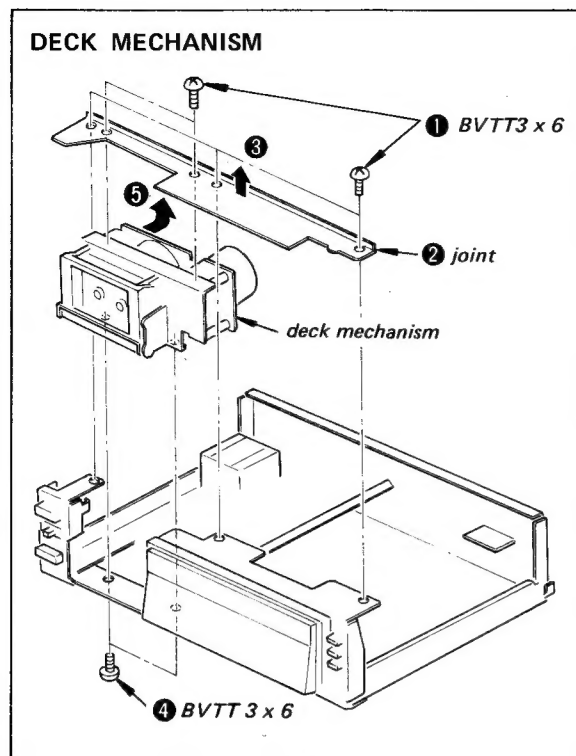
CASSETTE LID PANEL

① , ② : cassette lid

③ - ⑤ : panel



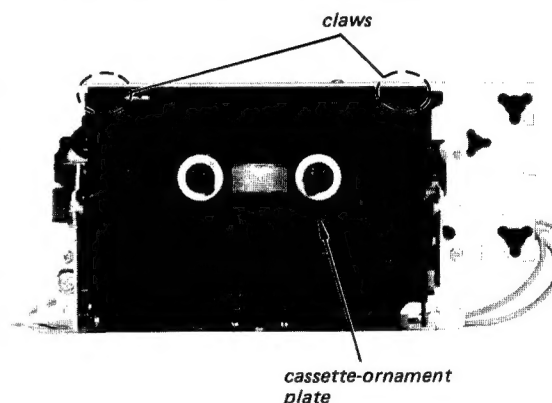
DECK MECHANISM



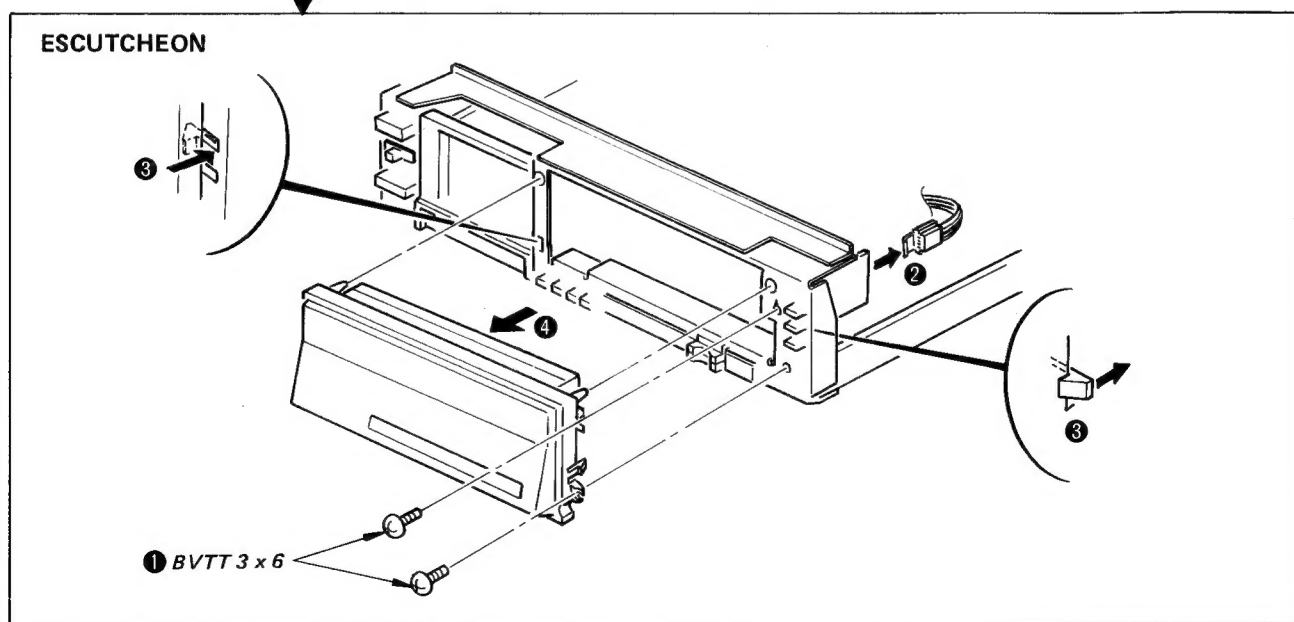
CASSETTE-ORNAMENT PLATE

Note: This set uses a newly-developed cassette-ornament plate. This plate does not need screws to be installed. So no care is exercised about the screws in this plate-mounting system.

- 1 Press the ejection button and open the cassette lid.
- 2 Remove the cassette lid. Remove the tape cassette from the cassette holder if any.
- 3 Release the two claws from the cassette-ornament plate at both top corners.
- 4 Depress the two slide-switch levers at the inside of the set and remove the cassette-ornament plate.
(Alternatively, push the two slide-switch levers up from inside of the cassette compartment, and remove the cassette-ornament plate.)
- 5 When reinstalling the cassette-ornament plate, perform the steps in a reverse manner.



ESCUTCHEON



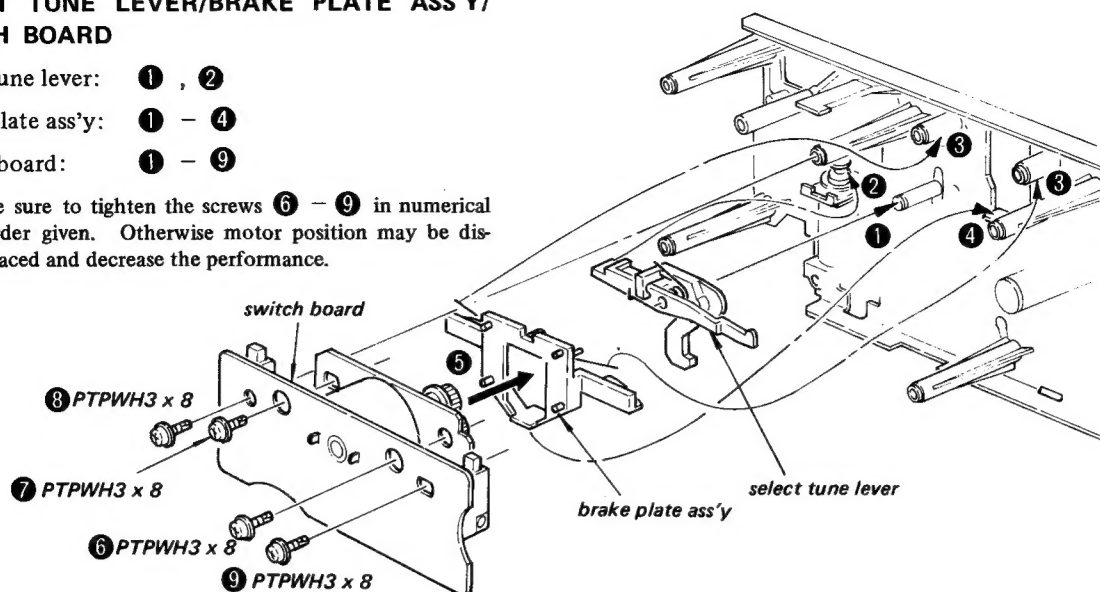
SELECT TUNE LEVER/BRAKE PLATE ASS'Y/ SWITCH BOARD

Select tune lever: ①, ②

Brake plate ass'y: ① - ④

Switch board: ① - ⑨

Note: Be sure to tighten the screws ⑥ - ⑨ in numerical order given. Otherwise motor position may be displaced and decrease the performance.



NOTE ON CASSETTE HOLDER INSTALLATION

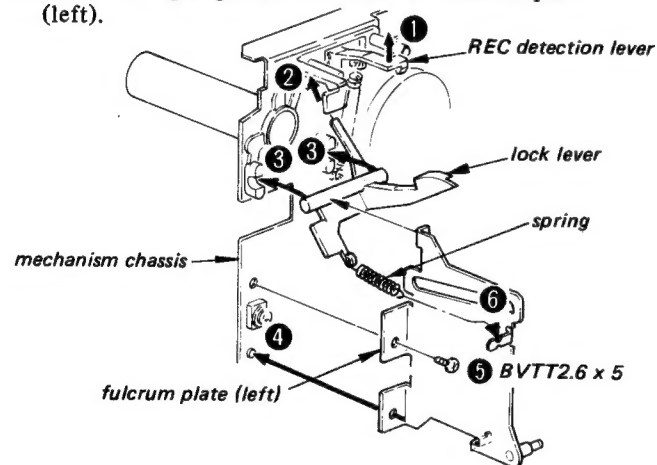
LOCK LEVER/FULCRUM PLATE (LEFT)

① Push up the REC detection lever and set the lock lever to positions ②, ③.

④ Fit the hole in the fulcrum plate (left) over the projection of mechanism chassis.

⑤ Tighten the screw (BVTT2.6 x 5).

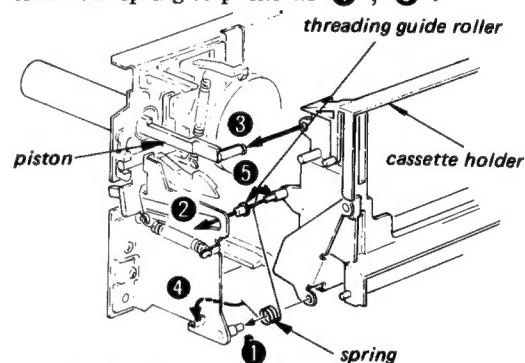
⑥ Hook the spring onto the claw of fulcrum plate (left).



CASSETTE HOLDER

Install ① - ③.

Hook the spring to positions ④, ⑤.

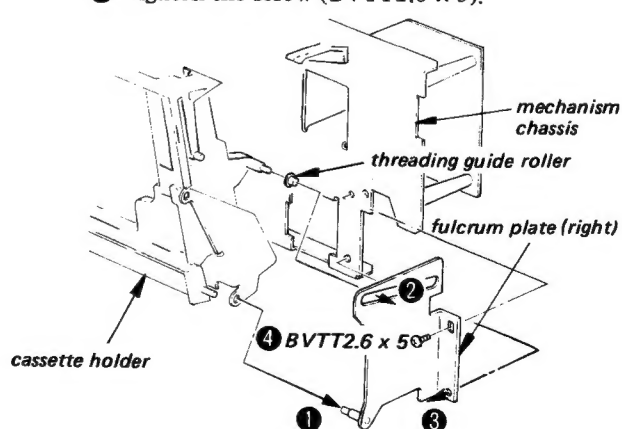


FULCRUM PLATE (RIGHT)

Install ①, ②.

③ Fit the hole in the fulcrum plate (right) over the projection of mechanism chassis.

④ Tighten the screw (BVTT2.6 x 5).



SECTION 3 ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

PRECAUTION

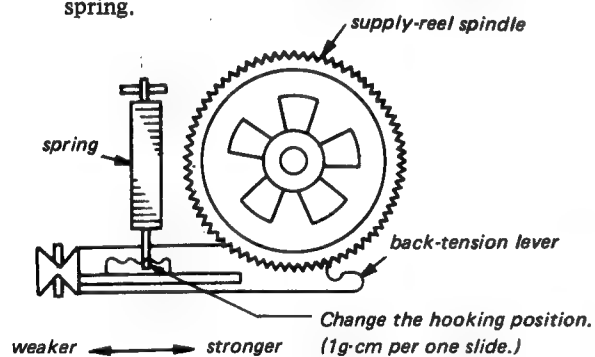
- Clean the following parts with a denatured-alcohol-moistened swab:

| | |
|----------------------|--------------|
| record/playback head | pinch roller |
| erase head | rubber belts |
| capstan | idlers |
- Demagnetize the record/playback head with a head demagnetizer.
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement and Back Tension Torque Adjustment

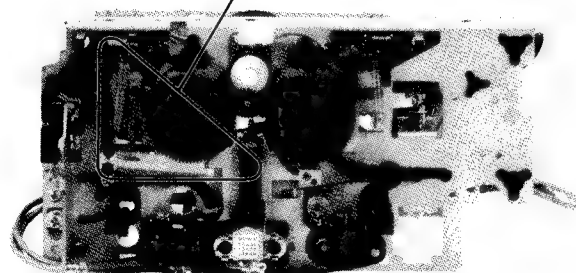
| Torque | Torque meter | Meter reading |
|--------------|--------------|---|
| Forward | CQ-102C | 30-60 g · cm (0.41-0.83 oz · inch) |
| Back tension | CQ-102C | 2.5-4.5 g · cm (0.04-0.06 oz · inch) |

- If the specified back-tension torque is not obtained, change the hooking position of the spring.



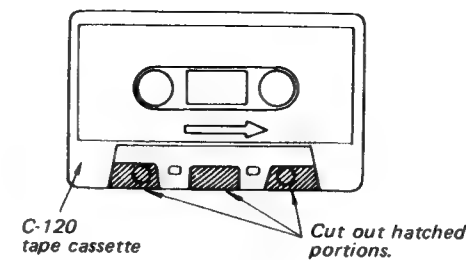
Confirmation:

| Torque | Torque meter | Meter reading |
|-----------|--------------|---|
| FF REW | CQ201B | 100-160 g · cm (1.38-2.22 oz · inch) |

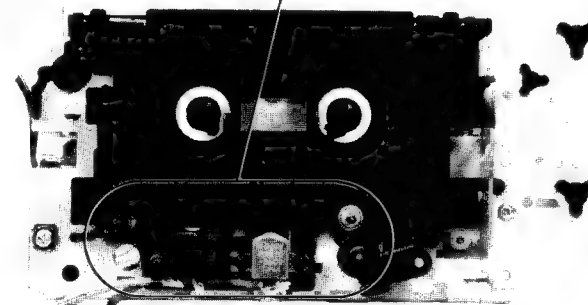
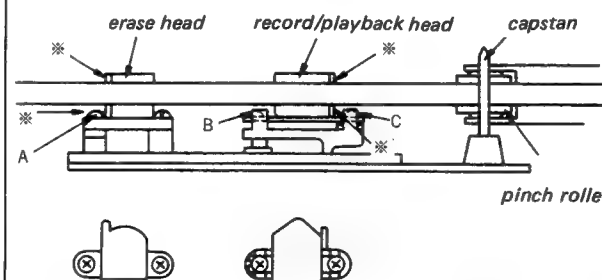


Head Height Adjustment

- Prepare an adjustment cassette as shown below.

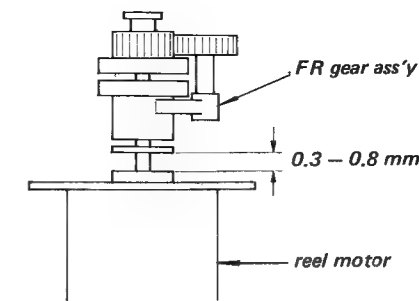


- In playback mode and viewing from the front, adjust the head heights by using the adjustment screw A, B, C, to eliminate tape curl and tape twist at portions shown by arrow (*).
- a) Remove the tape curl at the erase head guides by turning the screw A.
- b) Remove the tape curl at the record/playback head guides by turning the screws B and C by the same amount of angle in the same direction.
- c) After the adjustment, apply suitable locking compound to the screws.



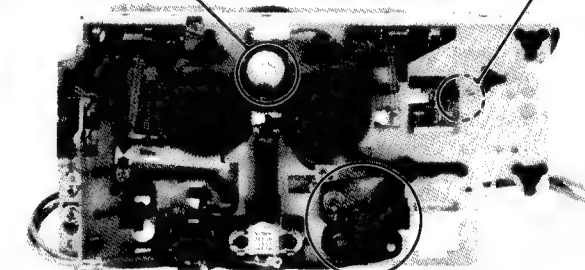
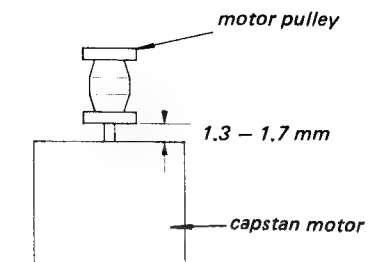
FR Gear Height Adjustment

— Stop Mode —



Motor Pulley Height Adjustment

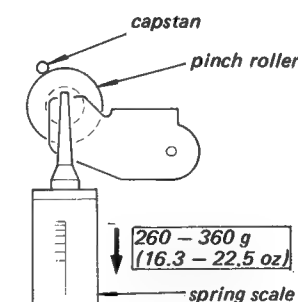
— Stop Mode —



Pinch Roller Pressure Adjustment

Procedure:

- Clean the pinch roller and the capstan.
- Set the unit to the forward mode. Measure the pinch roller pressure by using the spring scale. Read the spring scale just when the pinch roller stops rotating without contacting the capstan.



3-2. ELECTRICAL ADJUSTMENTS

Note: The adjustment should be performed in the order given in this service manual. The adjustments should be performed for both L-CH and R-CH.

- Set the TAPE switches according to the tape as follows.

| Tape | TAPE switch |
|-------|-------------|
| CS-10 | TYPE I |
| CS-25 | TYPE II |
| CS-30 | TYPE III |
| CS-40 | TYPE IV |

- Switches and controls should be set as follows unless otherwise specified.

DOLBY NR switch : OFF
TAPE switch : TYPE I
TIMER switch : OFF

- Standard Record :

Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

Standard Input Level

| | MIC | LINE IN |
|------------------|----------------|---------------|
| source impedance | 300Ω | 10kΩ |
| input level | 0.77mV (-60dB) | 0.25V (-10dB) |

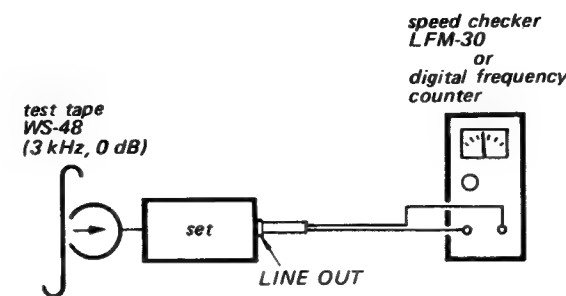
Standard Output Level

| | HEADPHONES | LINE OUT |
|----------------|---------------|---------------|
| load impedance | 8Ω | 47kΩ |
| output level | 31 mV (-26dB) | 0.435V (-5dB) |

Capstan Motor Speed Adjustment

Procedure:

Mode: playback

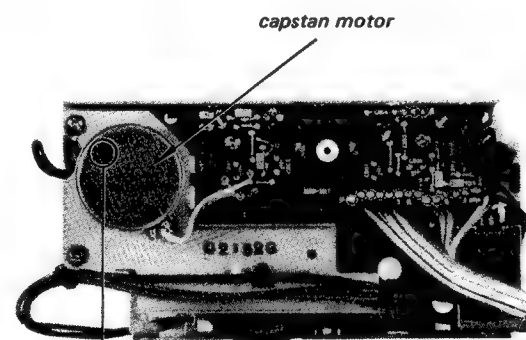


Specification:

| Speed checker | Digital frequency counter |
|-----------------|---------------------------|
| -0.17 to +0.17% | 2.995 to 3.005 Hz |

Frequency difference between the beginning and the end of the tape should be within 1 % (30 Hz).

Adjustment Location:



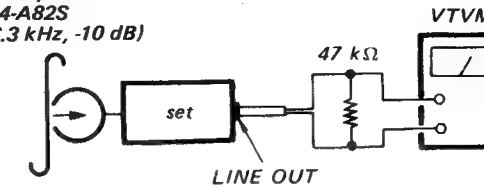
Adjust the speed by using screwdriver. When turning the screw clockwise, speed is faster.

Record/Playback Head Azimuth Adjustment

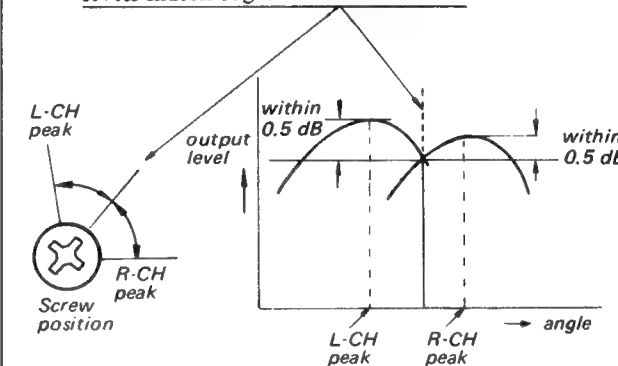
Procedure:

1. Mode: playback

test tape P-4-A82S (6.3 kHz, -10 dB)



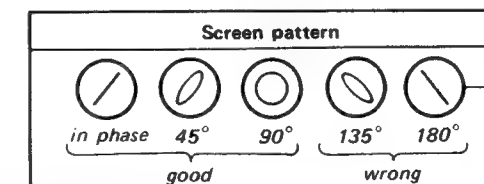
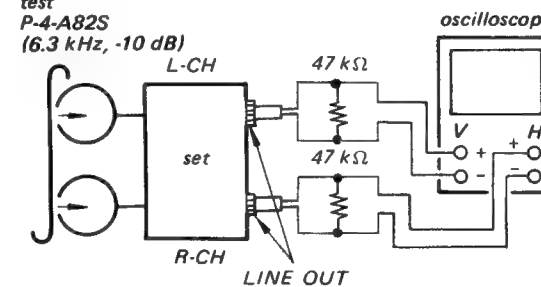
- Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 0.5 dB.



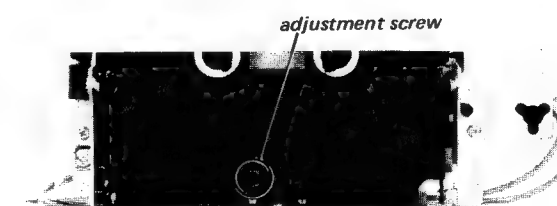
3. Phase Check

Mode: playback

test P-4-A82S (6.3 kHz, -10 dB)



Adjustment Location:

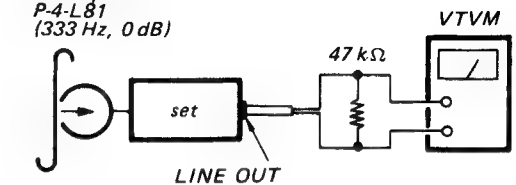


Playback Level Adjustment

Procedure:

Mode :playback

test tape P-4-L81 (333 Hz, 0 dB)



Specification:

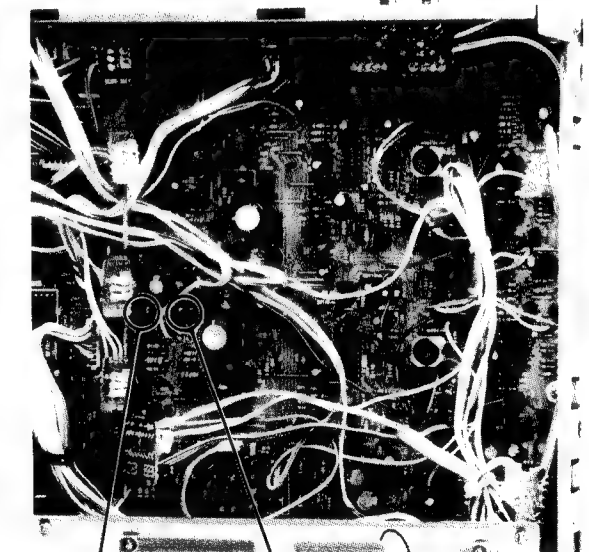
LINE OUT level: 0.44 to 0.49 V (-4.9 to 3.9 dB)

Level difference between channels : less than 0.5 dB

Check that the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location:

- record/playback board -



RV202 (R-CH)

RV102 (L-CH)

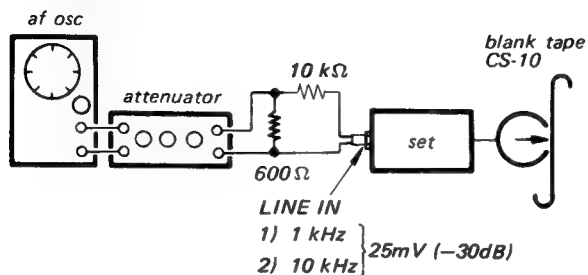
Record Bias Adjustment

Setting:

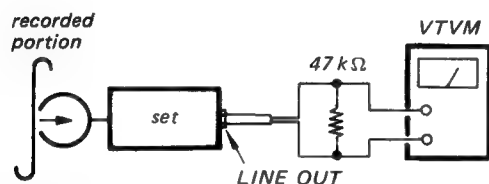
REC LEVEL control: standard record
(See page 13)

Procedure:

1. Mode: record



2. Mode: playback



Adjust CT001 (L-CH), (R-CH) so that the LINE OUT level of 10 kHz signal is 0 dB relative to that of 1 kHz.

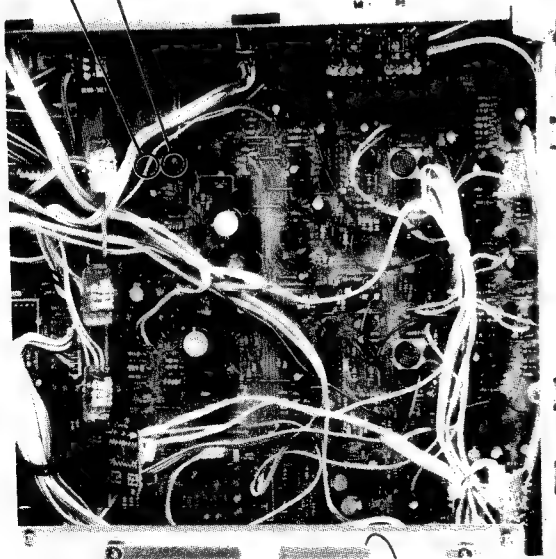
Specification:

0 dB \pm 0.5 dB

Adjustment Location:

— record/playback board —

CT001
R-CH L-CH



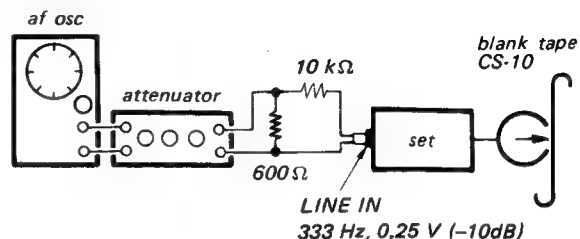
Record Level Adjustment

Setting:

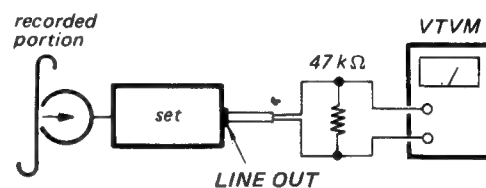
REC LEVEL control: standard record
(See page 13)

Procedure:

1. Mode: record



2. Mode: playback



Specification:

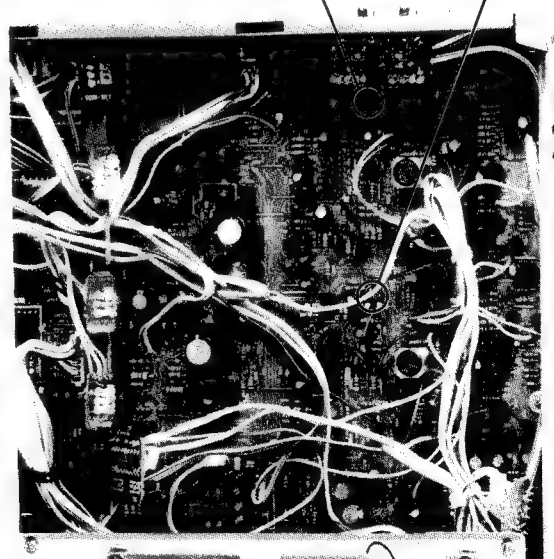
LINE OUT level : 0.41 to 0.46 V
(-5.5 to -4.5 dB)

Adjustment Location:

— record/playback board —

RV401
(R-CH)

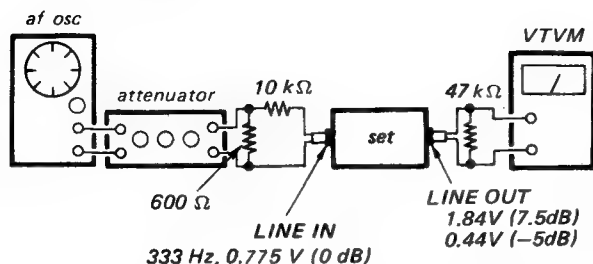
RV301
(L-CH)



LEVEL METER ADJUSTMENT

Procedure:

1. Mode : record

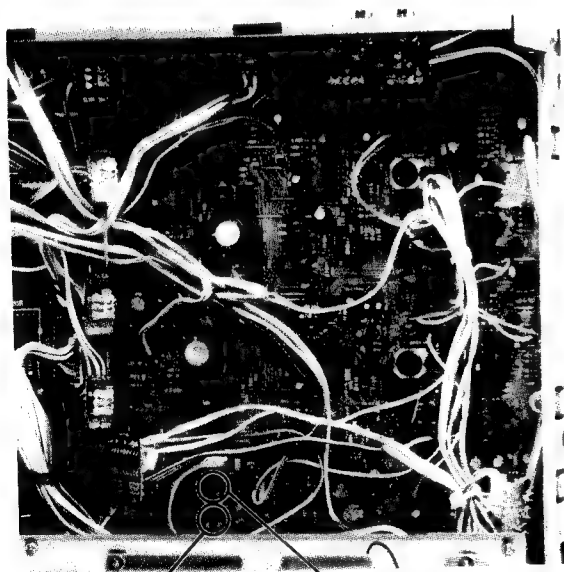


1. Set the REC LEVEL control so that the LINE OUT level is +6.5 dB.
2. Adjust RV103 (L-CH) and RV203 (R-CH) so that the LBDs including 8 dB (right-most element) light up.
3. Set the REC LEVEL control so that the LINE OUT level is -5 dB.
Make sure that LED meter indicates -4 dB (0 VU).

Note: Slide the REC LEVEL control rightward slowly.
(Be careful to peakhold indication.)

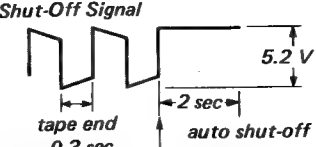
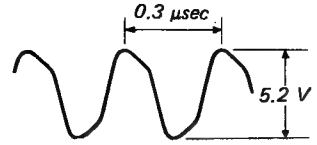
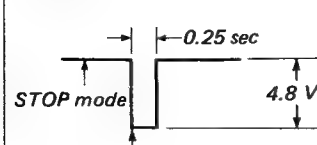
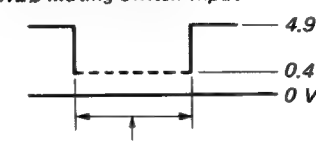
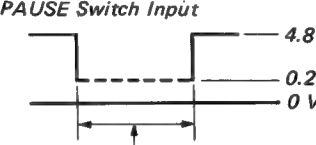
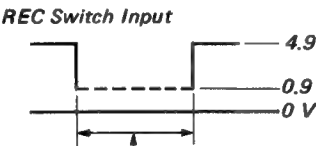
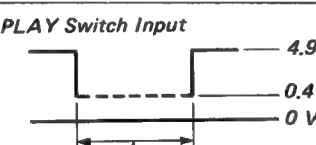
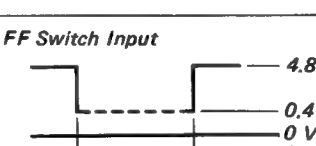
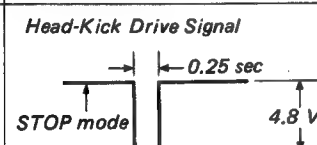
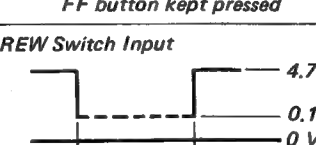
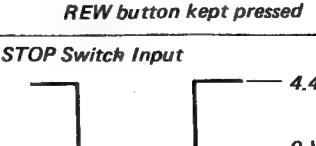
Adjustment Location:

— record/playback board —

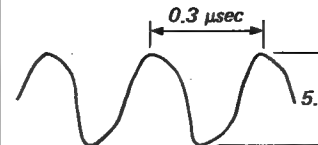
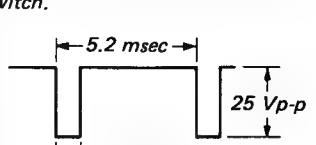
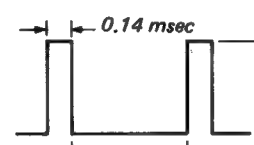
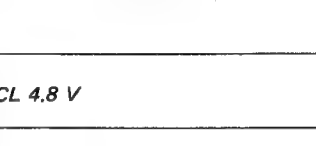
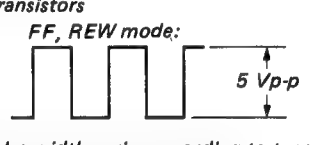
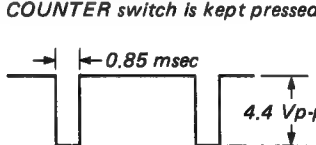
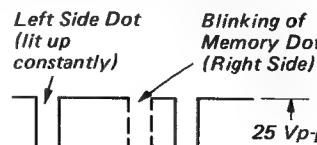


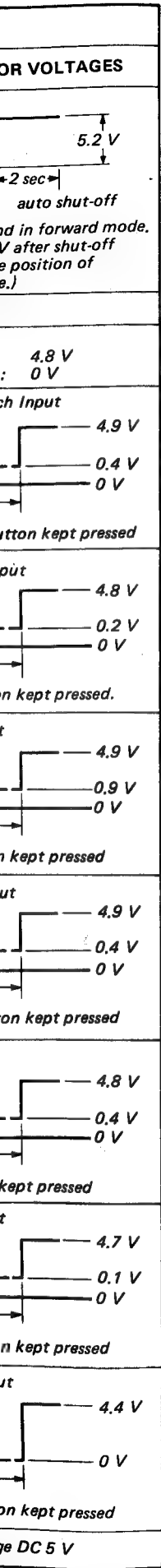
RV203
(R-CH)

RV103
(L-CH)

| TERMINAL NAME, WAVEFORM AND OPERATING VOLTAGES OF IC501 | | | | | |
|---|--|---------|---|---------|---|
| PIN No. | WAVEFORM OR VOLTAGES | PIN No. | WAVEFORM OR VOLTAGES | PIN No. | WAVEFORM OR VOLTAGES |
| (1) | GND (Ground) | (16) | BIAS 4.8 V | (32) | Shut-Off Signal  Stopped at tape end in forward mode. (May become 0 V after shut-off depending on the position of take-up reel table.) |
| (2) | Xtal Signal  | (17) | AMS-Kick Drive Signal  | (33) | Counter 4.8 V |
| (3) | Reset Signal 4.6 V | (18) | LINE-Muting Drive Signal REC/PLAY mode: 0 V STOP mode: 4.8 V | (34) | Cassette Half Det With cassette: 4.8 V Without cassette: 0 V |
| (4) | IRQ 5 V | (19) | REC-Muting Drive Signal REC mode: 0.1 V STOP mode: 1.6 V | (35) | REC-Muting Switch Input  |
| (5) | Not used | (20) | AMS Muting Drive Signal 0.6 V | (36) | PAUSE Switch Input  |
| (6) | S1 Signal 4.9 V | (21) | GND (Ground) | (37) | REC Switch Input  |
| (7) | SC/TO 5 V | (22) | AMS Solenoid Drive Signal REW/FF mode: 0 V STOP mode: 5 V | (38) | PLAY Switch Input  |
| (8) | TC 5 V | (23) | Head-Solenoid Drive Signal PLAY mode: 0 V STOP mode: 4.8 V | (39) | FF Switch Input  |
| (9) | PLAY Lamp Drive Signal PLAY mode: 0.3 V STOP mode: 3.4 V | (24) | Head-Kick Drive Signal  | (40) | REW Switch Input  |
| (10) | REC Lamp Drive Signal REC mode: 0.2 V STOP mode: 4.8 V | (25) | REC/PB Relay Drive Signal REC mode: 0 V STOP mode: 4.8 V | (41) | STOP Switch Input  |
| (11) | PAUSE Lamp Drive Signal PAUSE mode: 0.3 V STOP mode: 3.5 V | (26) | Timer Signal Timer Switch OFF mode: 4.8 V PLAY mode: 0 V | (42) | B + Supply Voltage DC 5 V |
| (12) | Not used | (27) | Timer Signal Timer Switch OFF mode: 4.8 V REC mode: 0 V | | |
| (13) | REW-Motor Drive Signal REW mode: 0 V STOP mode: 4.8 V | (28) | 3H/2H 4.8 V | | |
| (14) | PLAY-Motor Drive Signal PLAY mode: 0 V STOP mode: 4.8 V | (29) | AMS Operating Signal STOP mode: 4.8 V | | |
| (15) | FF-Motor Drive Signal FF mode: 0 V STOP mode: 4.8 V | (30) | AMS Mode Signal ON mode: 0.05 V OFF mode: 4.8 V | | |
| | | (31) | Accidental Erasure With cassette: 4.8 V Without cassette: 0 V | | |

Note: Voltage readings on this list are measured by oscilloscope with 10 MΩ probe. Therefore the readings are a little different from those measured by VOM on the schematic and mounting diagrams.

| TERMINAL NAME, WAVEFORM AND OPERATING VOLTAGES OF IC502 | | | | | |
|---|--|---------|--|---------|---|
| PIN No. | WAVEFORM OR VOLTAGES | PIN No. | WAVEFORM OR VOLTAGES | PIN No. | WAVEFORM OR VOLTAGES |
| (1) | GND (Ground) | (5) | S0 4.9 V | (21) | GND (Ground) |
| (2) | Xtal Signal  | (6) | S1 5 V | (22) | Drive Signal for Grids G1 through G6 of Fluorescent Display Tube In OFF mode of the each AMS Switch. |
| (3) | Reset Signal | (7) | SC/TO 5 V | (23) |  |
| (4) | IRQ Signal  | (8) | TC 5 V | (24) |  |
| | | (9) | Not used | (25) | |
| | | (10) | Not used | (26) | |
| | | (11) | Not used | (27) | |
| | | (12) | Not used (counter) | (28) | SCL 4.8 V |
| | | | | (29) | REC MUTE 4.8 V |
| | | | | (30) | φ1 or φ2 - Signal Input from Photo Transistors FF, REW mode:  |
| | | | | (31) | Pulse width varies according to tape take-up. (STOP mode: 5 V DC or 0 V according to the relative positions of photo transistors and reel table.) |
| | | | | (32) | AMS Signal 0 V |
| | | | | (33) | Switch 1 Signal Following waveform appears while AMS, REPEAT, MEMORY, CLEAR, or COUNTER switch is kept pressed.  |
| | | | | (34) | AMS Signal Output 4.8 V |
| | | | | (35) | AMS MODE 4.8 V |
| | | | | (36) | Not used |
| (14) | Drive Signal for "b" Segments of Fluorescent Display Tube same as terminal (13) for segments "a". | (18) | Drive Signal for "f" Segments of Fluorescent Display Tube same as terminal (13) for segments "a". | (37) | REC Lamp Input REC mode: 0.2 V STOP mode: 4.8 V |
| (15) | Drive Signal for "c" Segments of Fluorescent Display Tube same as terminal (13) for segments "a". | (19) | Drive Signal for "g" Segments of Fluorescent Display Tube same as terminal (13) for segments "a". | (38) | PAUSE Lamp Input 4.8 V |
| (16) | Drive Signal for "d" Segments of Fluorescent Display Tube same as terminal (13) for segments "a". | (20) | Drive Signal for "Dp" (dot) of Fluorescent Display Tube  | (39) | FF-Motor Input FF mode: 0 V STOP mode: 4.8 V |
| (17) | Drive Signal for "e" Segments of Fluorescent Display Tube same as terminal (13) for segments "a". | | | (40) | PLAY-Motor Input PLAY mode: 0 V STOP mode: 4.8 V |
| | | | | (41) | REW-Motor Input REW mode: 0 V STOP mode: 4.8 V |
| | | | | (42) | B + Supply Voltage DC 5 V |



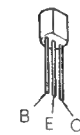
| TERMINAL NAME, WAVEFORM AND OPERATING VOLTAGES OF IC502 | | | | | |
|---|--|---------|----------------------|---------|---|
| PIN No. | WAVEFORM OR VOLTAGES | PIN No. | WAVEFORM OR VOLTAGES | PIN No. | WAVEFORM OR VOLTAGES |
| ① | GND (Ground) | ⑤ | S0 4.9 V | ②1 | GND (Ground) |
| ② | Xtal Signal | ⑥ | S1 5 V | ②2 | Drive Signal for Grids G1 through G6 of Fluorescent Display Tube In OFF mode of the each AMS Switch. |
| ③ | Reset Signal | ⑦ | SC/TO 5 V | ②3 | |
| ④ | IRQ Signal | ⑧ | TC 5 V | ②4 | |
| ⑤ | Drive Signal for "a" Segment of Fluorescent Display Tube 1) In case of all six "a" segments are not lit, i.e., all of the six digits are "1" or "4", or display of the counter section is "1" or "4" without the AMS and REPEAT. 2) In case of one of "a" segments is lit, i.e., one out of six digits is "0", "2", "3", "5", "6", "7", "8", or "9", and all others are "1" or "4". 3) In case of two "a" segments out of six digits are lit as in the case of 2) above. 4) In case of three "a" segments out of six digits are lit as in the case of 2) above. 5) In case of all "a" segments are lit in the same way. | ⑨ | Not used | ②5 | |
| ⑬ | Drive Signal for "b" Segments of Fluorescent Display Tube same as terminal ⑬ for segments "a". | ⑩ | Not used | ②6 | |
| ⑮ | Drive Signal for "c" Segments of Fluorescent Display Tube same as terminal ⑬ for segments "a". | ⑪ | Not used | ②7 | |
| ⑮ | Drive Signal for "d" Segments of Fluorescent Display Tube same as terminal ⑬ for segments "a". | ⑫ | Not used (counter) | ②8 | SCL 4.8 V |
| ⑰ | Drive Signal for "e" Segments of Fluorescent Display Tube same as terminal ⑬ for segments "a". | | | ②9 | REC MUTE 4.8 V |
| | | | | ③0 | φ1 or φ2 - Signal Input from Photo Transistors FF, REW mode: |
| | | | | ③1 | Pulse width varies according to tape take-up. (STOP mode: 5 V DC or 0 V according to the relative positions of photo transistors and reel table.) |
| | | | | ③2 | AMS Signal 0 V |
| | | | | ③3 | Switch 1 Signal Following waveform appears while AMS, REPEAT, MEMORY, CLEAR, or COUNTER switch is kept pressed. |
| | | | | ③4 | AMS Signal Output 4.8 V |
| | | | | ③5 | AMS MODE 4.8 V |
| | | | | ③6 | Not used |
| | | | | ③7 | REC Lamp Input REC mode: 0.2 V STOP mode: 4.8 V |
| | | | | ③8 | PAUSE Lamp Input 4.8 V |
| | | | | ③9 | FF-Motor Input FF mode: 0 V STOP mode: 4.8 V |
| | | | | ④0 | PLAY-Motor Input PLAY mode: 0 V STOP mode: 4.8 V |
| | | | | ④1 | REW-Motor Input REW mode: 0 V STOP mode: 4.8 V |
| | | | | ④2 | B + Supply Voltage DC 5 V |

● Semiconductor Lead Layouts

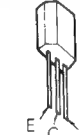
2SA733
2SA844
2SC945
2SC1345
2SC1363
2SC1364
2SC2001
2SD789
2SD1152



2SA952



2SA1026
2SA1027R



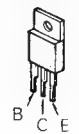
2SB734
2SD774



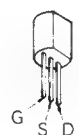
2SB548
2SD414
2SD809



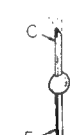
2SD880



2SK120



PH102



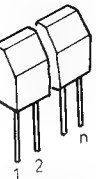
BA6138



CX174-2
MB84049B
MB8843-590
MB8843-594
NJM2903D
NJM4558S
MSL9359RS
MB84069B
TC40H004P
μPC339C



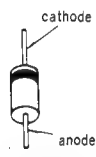
M5218L



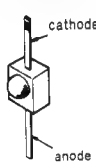
NJM2043S-D



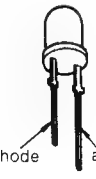
10E2
10DF2
1S1555
EQB01-07
HZ6B1L
HZ6C3L
HZ7B1L
HZ11B1L
HZ20-1L
HZ27-1L

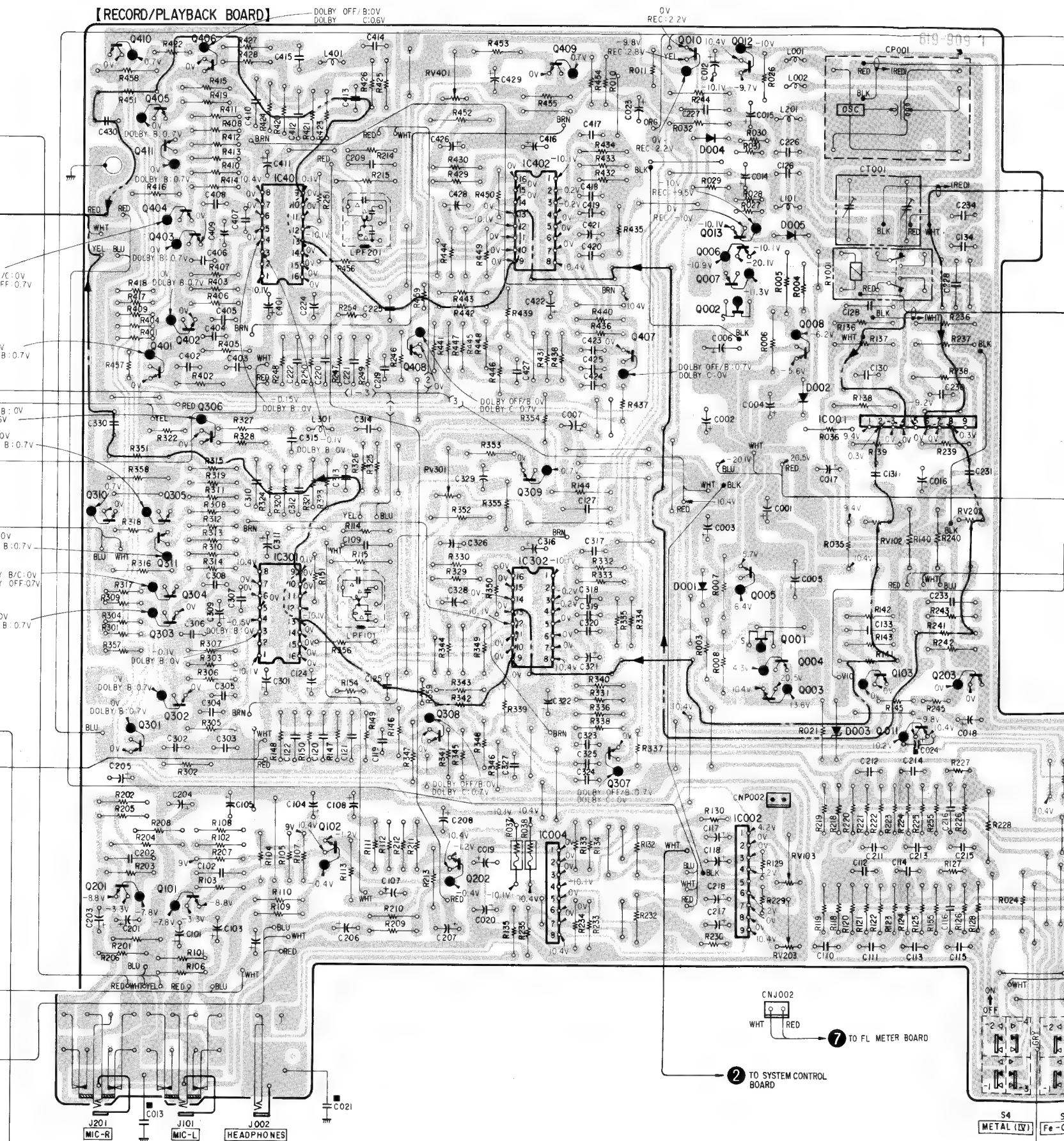
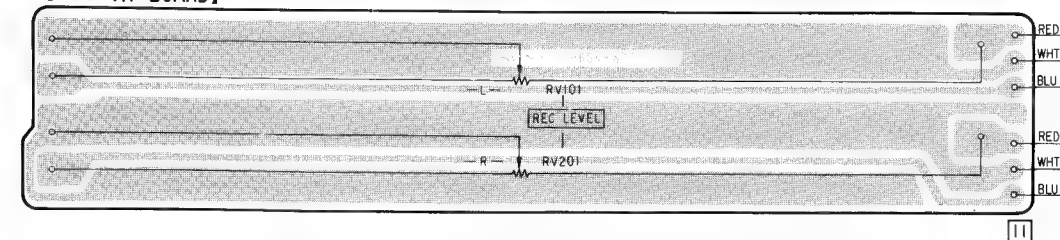
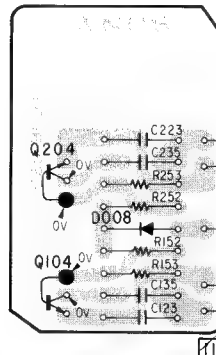
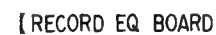
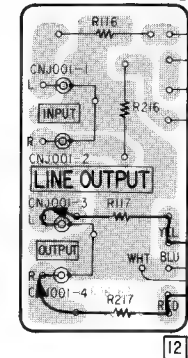


AA2222S
AR2222S
PG2222SX



SEL1710K





ACK BOARD]

OUTPUT

3 RH7

4 R217

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[RECORD/PLAYBACK BOARD]

DOLBY OFF/B:0V
DOLBY C:0.6V

0V
REC-2.2V

0V
REC-2.2V

0V
REC-2.2V

0V
REC-2.2V

0V
REC-2.2V

0V
REC-2.2V

EQ BOARD

EQ BOARD

EQ BOARD

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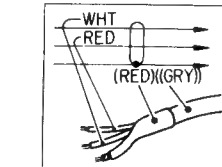
EQ BOARD

EQ BOARD

| IC - Q | D |
|-------------|-----|
| 410 409 012 | |
| 406 010 | |
| 405 | 004 |
| 411 IC402 | |
| IC401 | |
| 404 | 005 |
| 403 013 006 | |
| 007 | 002 |
| 408 008 | |
| 402 407 | 002 |
| 401 | |
| IC001 | |
| 306 | |
| 309 | |
| 310 305 | |
| 311 IC302 | |
| IC301 | 001 |
| 304 005 | |
| 303 | 001 |
| 004 | |
| 103 | |
| 203 | |
| 003 | |
| 302 204 | 008 |
| 301 308 011 | |
| 307 | |
| 104 | |
| 102 IC002 | |
| IC004 | |
| 202 | |
| 201 101 | |

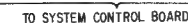
Note:

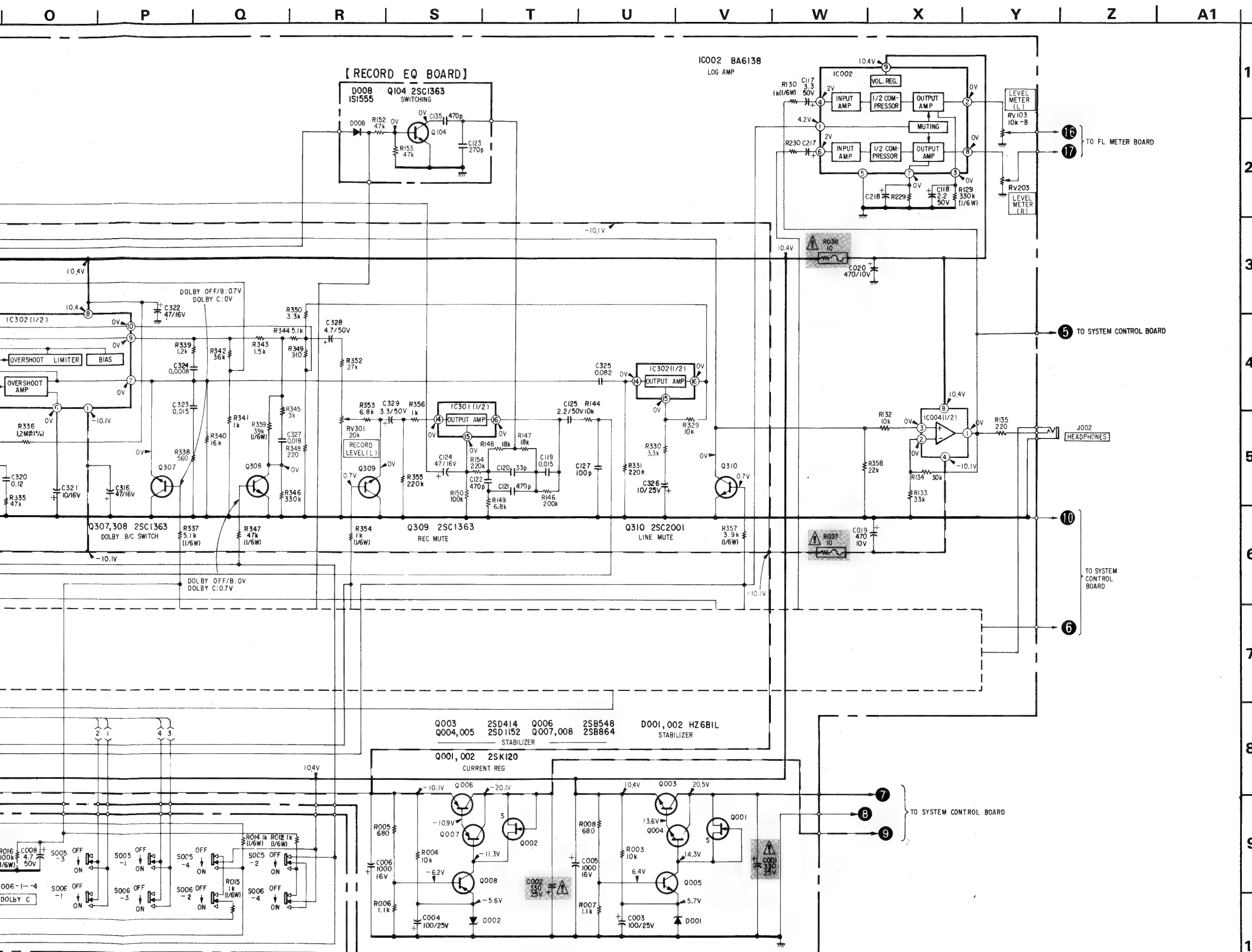
- Color code of sleeving over the end of the jacket.



- parts extracted from the component side.
- parts extracted from the conductor side.
- indicates side identified with part number.
- B+ pattern

- signal path
- L-CH signal path
- R-CH signal path





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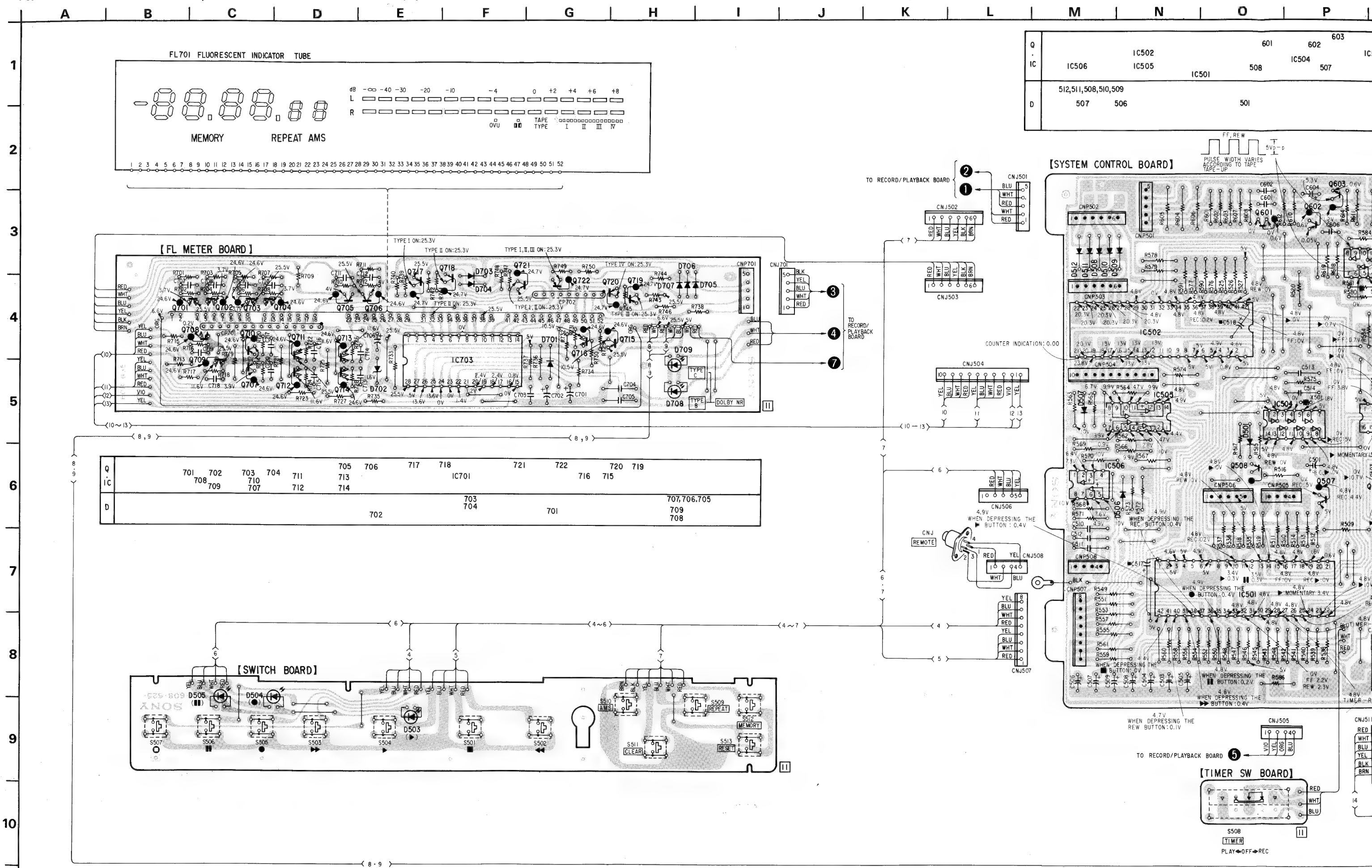
- Note:**
- Components for right channel have same values as for left channel. Reference numbers are codes from 200 and 400.
 - All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in ohms, $\frac{1}{4}\text{W}$ unless otherwise noted. $\text{k}\Omega$: 1000 Ω , $\text{M}\Omega$: 1000 $\text{k}\Omega$
 - : fusible resistor.
 - : panel designation.
 - : adjustment for repair.
 - : B+ bus.
 - : B- bus.
 - Voltages are dc with respect to ground unless otherwise noted.
 - Readings are taken under no-signal (detuned) conditions with a VOM (50 $\text{k}\Omega/\text{V}$)
 - Switch

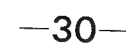
| Ref. No. | Switch | Position |
|----------|----------------------------|----------|
| S1 | TYPE I (NORMAL) | ON |
| S2 | TYPE II (CrO_2) | OFF |
| S3 | TYPE III (Fe-Cr) | OFF |
| S4 | TYPE IV (METAL) | OFF |
| S005 | DOLBY B | OFF |
| S006 | DOLBY C | OFF |

Note: Voltages are measured with a VOM (50kΩ/V).

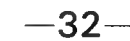
Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

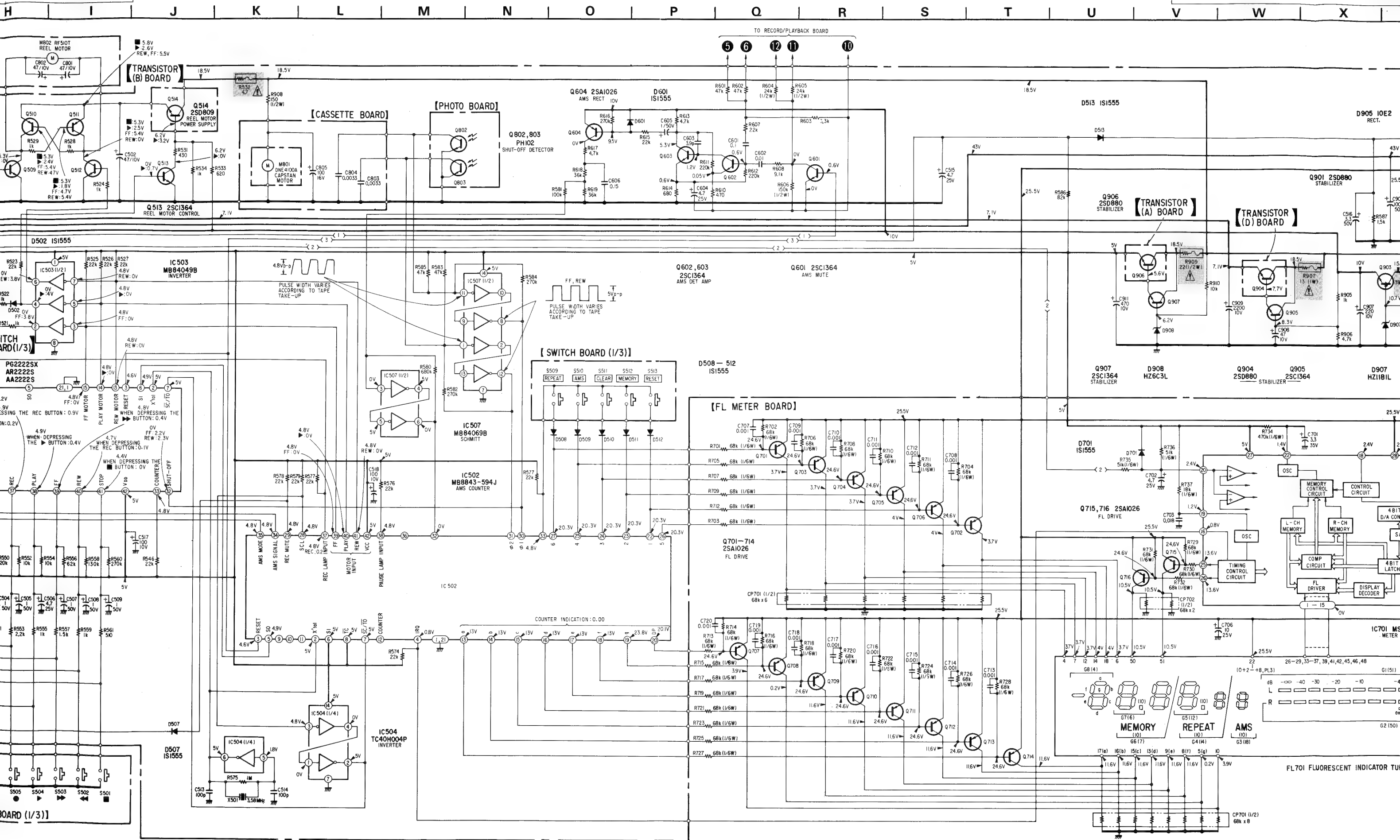
Note: Les composants identifiés par un trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



11

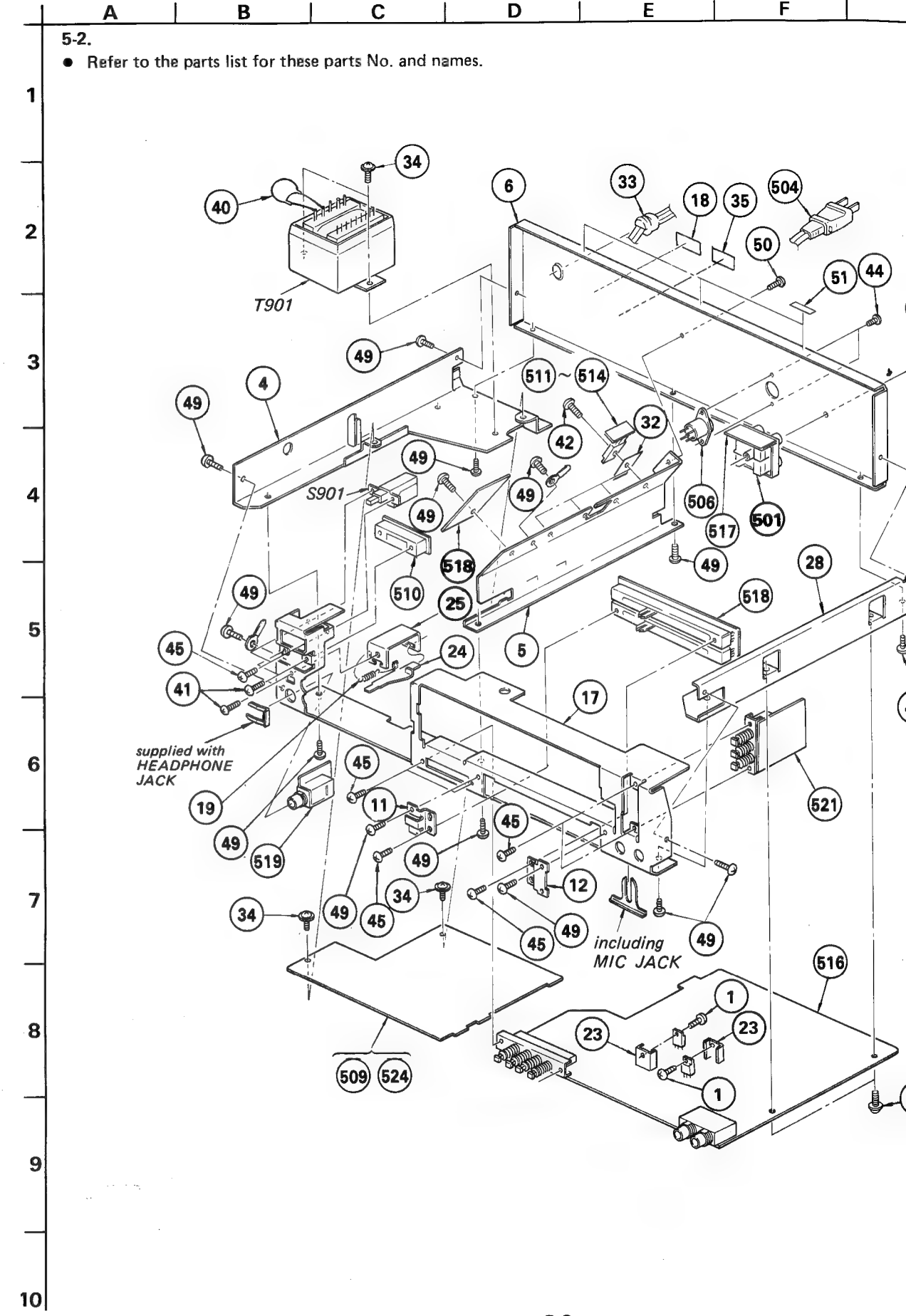
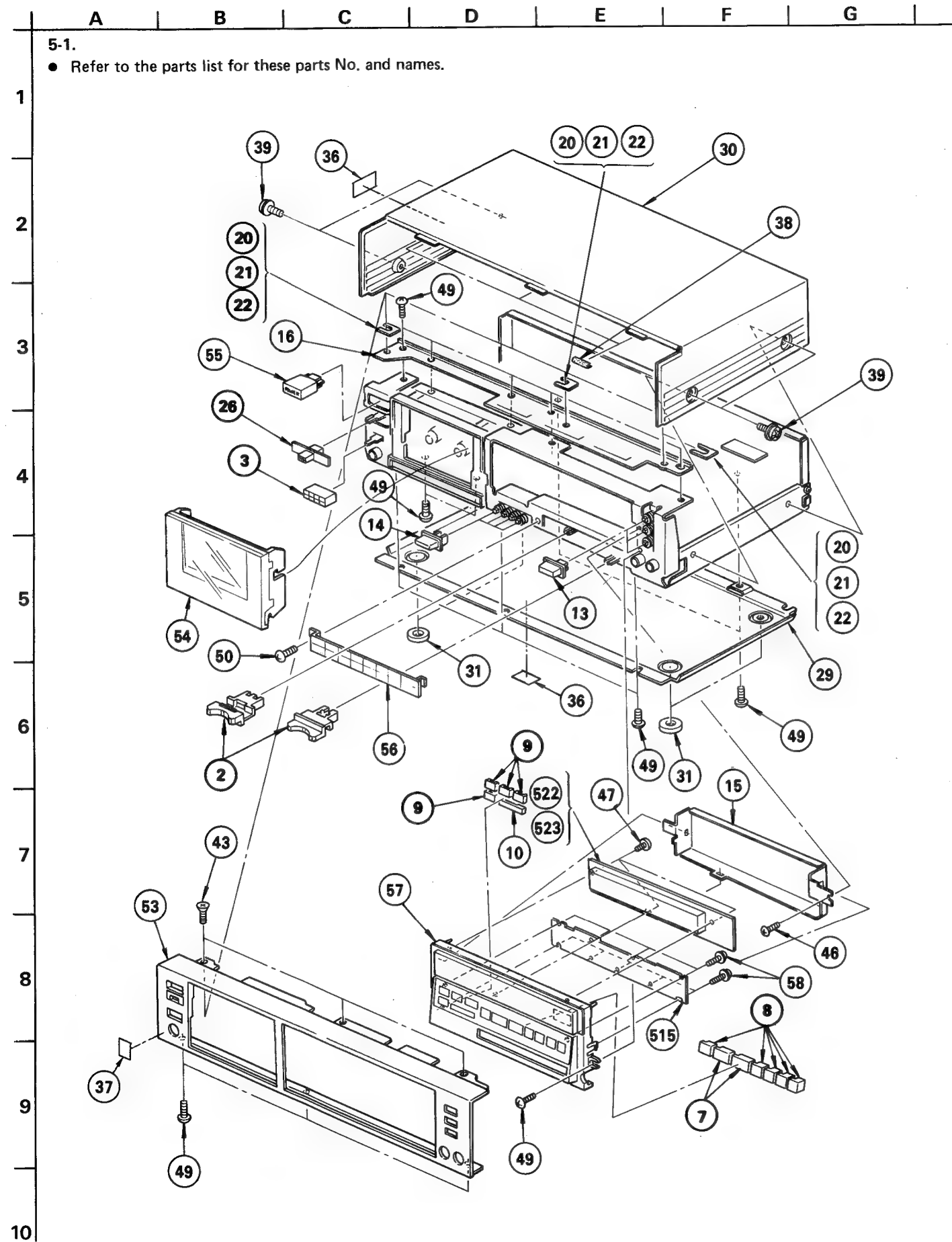
- ○: parts extracted from the component side.
- ●: parts extracted from the conductor side.
- ■: B+ pattern







SECTION 5
EXPLODED VIEWS AND PARTS LIST



G

A

B

C

D

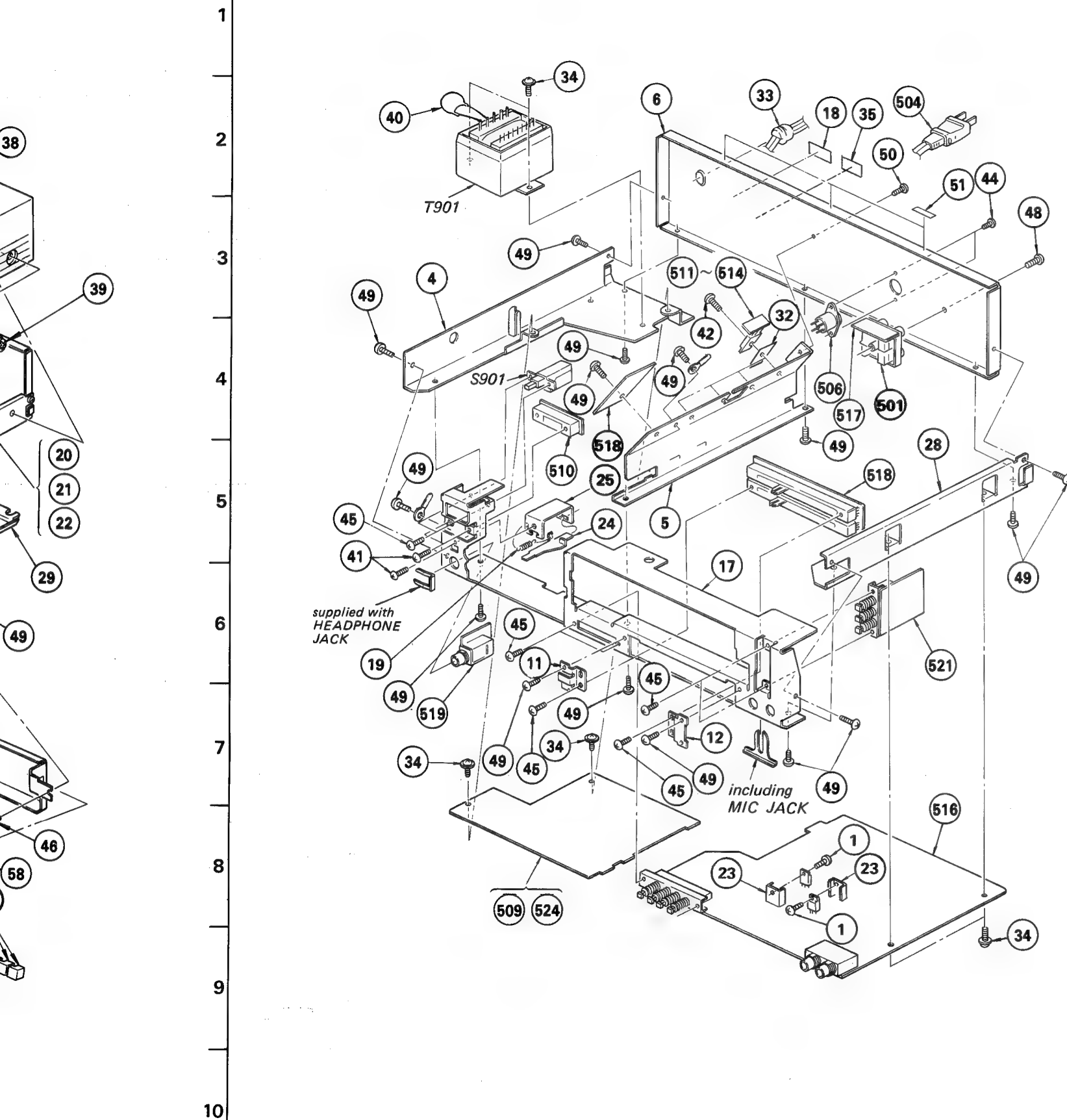
E

F

G

5-2.

- Refer to the parts list for these parts No. and names.



A

B

C

D

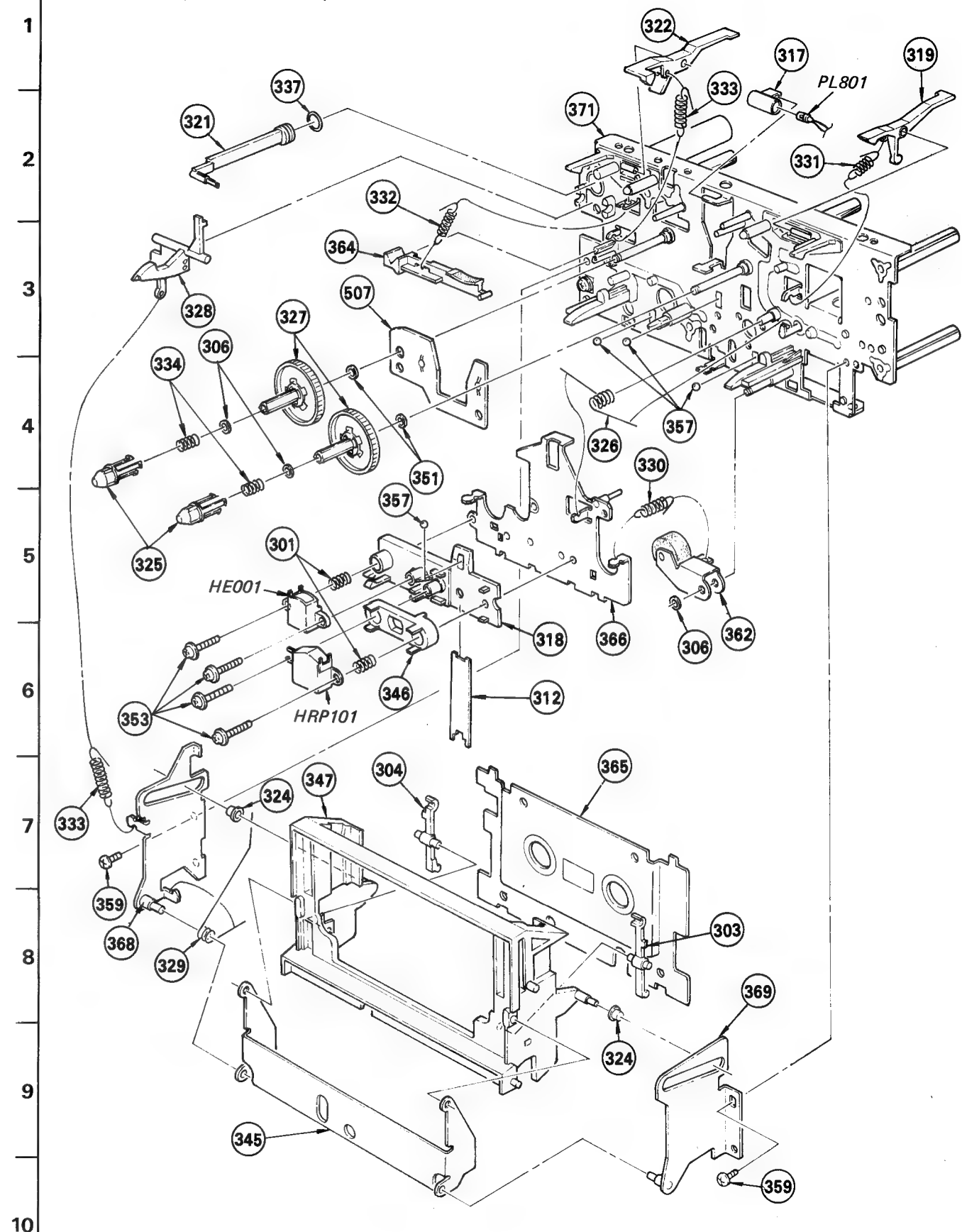
E

F

G

5-3.

- Refer to the parts list for these parts No. and names.



ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|----------------|-------------------------------|----------|-----|-----|
| 512 | ▲;1-606-827-00 | PC BOARD, TRANSISTOR (B) | | | |
| 513 | ▲;1-606-828-00 | PC BOARD, TRANSISTOR (C) | | | |
| 514 | ▲;1-606-829-00 | PC BOARD, TRANSISTOR (D) | | | |
| 515 | ▲;1-608-525-00 | PC BOARD, SWITCH | | | |
| 516 | ▲;1-608-629-00 | PC BOARD, REC/PB | | | |
| 517 | ▲;1-608-630-00 | PC BOARD, PIN JACK | | | |
| 518 | ▲;1-608-631-00 | PC BOARD, REC VOL | | | |
| 519 | ▲;1-608-632-00 | PC BOARD, HEADPHONE JACK | | | |
| 520 | ▲;1-608-633-00 | PC BOARD, TAPE SELECT | | | |
| 521 | ▲;1-608-634-00 | PC BOARD, DOLBY SWITCH | | | |
| 522 | ▲;1-608-635-00 | PC BOARD, COUNTER METER | | | |
| 523 | ▲;A-2029-086-A | MOUNTED PCB, FLT | | | |
| 524 | ▲;A-2056-199-A | PC BOARD ASSY, SYSTEM CONTROL | | | |
| C001 | ▲;1-123-335-00 | ELECT | 330MF | 20% | 25V |
| C002 | ▲;1-123-335-00 | ELECT | 330MF | 20% | 25V |
| C003 | 1-123-333-00 | ELECT | 100MF | 20% | 25V |
| C004 | 1-123-333-00 | ELECT | 100MF | 20% | 25V |
| C005 | 1-121-245-00 | ELECT | 1000MF | | 16V |
| C006 | 1-121-245-00 | ELECT | 1000MF | | 16V |
| C007 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C008 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C009 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C010 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C012 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C013 | 1-161-328-00 | CERAMIC | 0.0047MF | 30% | 50V |
| C014 | 1-123-354-00 | ELECT | 3.3MF | 20% | 50V |
| C015 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C016 | 1-123-322-00 | ELECT | 330MF | 20% | 16V |
| C017 | 1-123-322-00 | ELECT | 330MF | 20% | 16V |
| C018 | 1-123-356-00 | ELECT | 10MF | 20% | 16V |
| C019 | 1-123-310-00 | ELECT | 470MF | 20% | 10V |
| C020 | 1-123-310-00 | ELECT | 470MF | 20% | 10V |
| C023 | 1-123-351-00 | ELECT | 0.47MF | 20% | 50V |
| C024 | 1-123-354-00 | ELECT | 3.3MF | 20% | 50V |
| C101 | 1-123-381-00 | ELECT | 2.2MF | 20% | 50V |
| C102 | 1-161-323-00 | CERAMIC | 0.001MF | 10% | 50V |
| C103 | 1-123-353-00 | ELECT | 2.2MF | 20% | 50V |
| C104 | 1-123-307-00 | ELECT | 100MF | 20% | 10V |
| C105 | 1-123-308-00 | ELECT | 220MF | 20% | 10V |
| C106 | 1-123-354-00 | ELECT | 3.3MF | 20% | 50V |
| C107 | 1-123-356-00 | ELECT | 10MF | 20% | 25V |
| C108 | 1-123-307-00 | ELECT | 100MF | 20% | 10V |
| C109 | 1-161-326-00 | CERAMIC | 0.0022MF | 30% | 50V |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|--------------|-------------|----------|-----|------|
| C110 | 1-108-555-00 | MYLAR | 0.001MF | 5% | 50V |
| C111 | 1-108-575-00 | MYLAR | 0.0068MF | 5% | 50V |
| C112 | 1-108-555-00 | MYLAR | 0.001MF | 5% | 50V |
| C113 | 1-108-575-00 | MYLAR | 0.0068MF | 5% | 50V |
| C114 | 1-108-575-00 | MYLAR | 0.0068MF | 5% | 50V |
| C115 | 1-130-624-00 | FILM | 0.022MF | 5% | 50V |
| C117 | 1-123-354-00 | ELECT | 3.3MF | 20% | 50V |
| C118 | 1-123-353-00 | ELECT | 2.2MF | 20% | 50V |
| C119 | 1-130-622-00 | FILM | 0.015MF | 5% | 50V |
| C120 | 1-161-265-00 | CERAMIC | 33PF | 5% | 50V |
| C121 | 1-161-319-00 | CERAMIC | 470PF | 10% | 50V |
| C122 | 1-161-319-00 | CERAMIC | 470PF | 10% | 50V |
| C123 | 1-161-316-00 | CERAMIC | 270PF | 10% | 50V |
| C124 | 1-123-319-00 | ELECT | 47MF | 20% | 16V |
| C125 | 1-123-230-00 | ELECT | 2.2MF | 20% | 50V |
| C126 | 1-107-167-00 | MICA | 75PF | 5% | 500V |
| C127 | 1-161-271-00 | CERAMIC | 100PF | 5% | 50V |
| C128 | 1-161-318-00 | CERAMIC | 390PF | 10% | 50V |
| C130 | 1-130-624-00 | FILM | 0.022MF | 5% | 50V |
| C131 | 1-123-230-00 | ELECT | 2.2MF | 20% | 50V |
| C132 | 1-161-316-00 | CERAMIC | 270PF | 10% | 50V |
| C133 | 1-161-328-00 | CERAMIC | 0.0047MF | 30% | 50V |
| C134 | 1-107-165-00 | MICA | 56PF | 5% | 500V |
| C135 | 1-161-319-00 | CERAMIC | 470PF | 10% | 50V |
| C215 | 1-130-624-00 | FILM | 0.022MF | 5% | 50V |
| C221 | 1-161-319-00 | CERAMIC | 470PF | 10% | 50V |
| C222 | 1-161-319-00 | CERAMIC | 470PF | 10% | 50V |
| C228 | 1-161-318-00 | CERAMIC | 390PF | 10% | 50V |
| C230 | 1-130-624-00 | FILM | 0.022MF | 5% | 50V |
| C235 | 1-161-319-00 | CERAMIC | 470PF | 10% | 50V |
| C301 | 1-123-319-00 | ELECT | 47MF | 20% | 16V |
| C302 | 1-130-635-00 | FILM | 0.18MF | 5% | 50V |
| C303 | 1-130-634-00 | FILM | 0.15MF | 5% | 50V |
| C304 | 1-130-632-00 | FILM | 0.1MF | 5% | 50V |
| C305 | 1-130-632-00 | FILM | 0.1MF | 5% | 50V |
| C306 | 1-130-621-00 | FILM | 0.012MF | 5% | 50V |
| C307 | 1-130-633-00 | FILM | 0.12MF | 5% | 50V |
| C308 | 1-108-559-00 | MYLAR | 0.0015MF | 5% | 50V |
| C309 | 1-123-356-00 | ELECT | 10MF | 20% | 16V |
| C310 | 1-130-631-00 | FILM | 0.082MF | 5% | 50V |
| C311 | 1-123-319-00 | ELECT | 47MF | 20% | 16V |
| C312 | 1-130-629-00 | FILM | 0.056MF | 5% | 50V |
| C313 | 1-130-628-00 | FILM | 0.047MF | 5% | 50V |
| C314 | 1-108-579-00 | MYLAR | 0.0068MF | 5% | 50V |
| C315 | 1-108-570-00 | MYLAR | 0.0043MF | 5% | 50V |

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- Due to standardization, parts with part numbers (▲-△△△-△△△-XX or ▲-△△△△-△△△-X) may be different from those used in the set.

CAPACITORS:

- All capacitors are in μF . Common capacitors are omitted. Refer to the following lists for their part numbers.
- MF: μF , PF: $\mu\mu\text{F}$.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

- F : nonflammable

COILS

- MMH : mH, UH : μH

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SEMICONDUCTORS

In each case, U : μ , for example:

UA....: μA ..., UPA....: μPA ..., UPC....: μPC ,
UPD....: μPD ...

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|--------------|-------------|----------|-----|------|
| C316 | 1-123-319-00 | ELECT | 47MF | 20% | 16V |
| C317 | 1-130-634-00 | FILM | 0.15MF | 5% | 50V |
| C318 | 1-130-628-00 | FILM | 0.047MF | 5% | 50V |
| C319 | 1-130-625-00 | FILM | 0.027MF | 5% | 50V |
| C320 | 1-130-633-00 | FILM | 0.12MF | 5% | 50V |
| C321 | 1-123-356-00 | ELECT | 10MF | 20% | 16V |
| C322 | 1-123-319-00 | ELECT | 47MF | 20% | 16V |
| C323 | 1-130-622-00 | FILM | 0.015MF | 5% | 50V |
| C324 | 1-108-575-00 | MYLAR | 0.0068MF | 5% | 50V |
| C325 | 1-130-631-00 | FILM | 0.082MF | 5% | 50V |
| C326 | 1-123-356-00 | ELECT | 10MF | 20% | 25V |
| C327 | 1-130-623-00 | FILM | 0.018MF | 5% | 50V |
| C328 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C329 | 1-123-354-00 | ELECT | 3.3MF | 20% | 50V |
| C330 | 1-123-232-00 | ELECT | 4.7MF | 20% | 50V |
| C403 | 1-130-634-00 | FILM | 0.15MF | 5% | 50V |
| C404 | 1-130-632-00 | FILM | 0.1MF | 5% | 50V |
| C405 | 1-130-632-00 | FILM | 0.1MF | 5% | 50V |
| C406 | 1-130-621-00 | FILM | 0.012MF | 5% | 50V |
| C412 | 1-130-629-00 | FILM | 0.056MF | 5% | 50V |
| C413 | 1-130-628-00 | FILM | 0.047MF | 5% | 50V |
| C415 | 1-108-570-00 | MYLAR | 0.0043MF | 5% | 50V |
| C417 | 1-130-634-00 | FILM | 0.15MF | 5% | 50V |
| C418 | 1-130-628-00 | FILM | 0.047MF | 5% | 50V |
| C419 | 1-130-625-00 | FILM | 0.027MF | 5% | 50V |
| C427 | 1-130-623-00 | FILM | 0.018MF | 5% | 50V |
| C501 | 1-123-298-00 | ELECT | 470MF | 20% | 6.3V |
| C502 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C503 | 1-130-626-00 | FILM | 0.033MF | 5% | 50V |
| C504 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C505 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C506 | 1-123-328-00 | ELECT | 4.7MF | 20% | 25V |
| C507 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C508 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C509 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C510 | 1-161-330-00 | CERAMIC | 0.01MF | 30% | 25V |
| C511 | 1-161-330-00 | CERAMIC | 0.01MF | 30% | 25V |
| C512 | 1-161-330-00 | CERAMIC | 0.01MF | 30% | 25V |
| C513 | 1-161-271-00 | CERAMIC | 100PF | 5% | 50V |
| C514 | 1-161-271-00 | CERAMIC | 100PF | 5% | 50V |
| C515 | 1-123-328-00 | ELECT | 4.7MF | 20% | 25V |
| C516 | 1-123-354-00 | ELECT | 3.3MF | 20% | 50V |
| C517 | 1-119-352-00 | ELECT | 100MF | | 10V |
| C518 | 1-119-352-00 | ELECT | 100MF | | 10V |
| C601 | 1-130-632-00 | FILM | 0.1MF | 5% | 50V |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|--------------|-------------------|----------|-----|-----|
| C602 | 1-130-620-00 | FILM | 0.01MF | 5% | 50V |
| C603 | 1-161-254-00 | CERAMIC | 3.9PF | 10% | 50V |
| C604 | 1-123-328-00 | ELECT | 4.7MF | 20% | 25V |
| C605 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C606 | 1-130-634-00 | FILM | 0.15MF | 5% | 50V |
| C701 | 1-123-613-00 | ELECT | 3.3MF | 20% | 35V |
| C702 | 1-123-616-00 | ELECT | 4.7MF | 20% | 25V |
| C703 | 1-130-623-00 | FILM | 0.018MF | 5% | 50V |
| C704 | 1-161-323-00 | CERAMIC | 0.001MF | 10% | 50V |
| C705 | 1-161-323-00 | CERAMIC | 0.001MF | 10% | 50V |
| C706 | 1-123-621- | ELECT | 10MF | 20% | 25V |
| C707 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C708 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C709 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C710 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C711 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C712 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C713 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C714 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C715 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C716 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C717 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C718 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C719 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C720 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C801 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C802 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C803 | 1-161-327-00 | CERAMIC | 0.0033MF | 30% | 50V |
| C804 | 1-161-327-00 | CERAMIC | 0.0033MF | 30% | 50V |
| C805 | 1-123-320-00 | ELECT | 100MF | 20% | 16V |
| C806 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C901 | 1-123-364-00 | ELECT | 1000MF | 20% | 50V |
| C902 | 1-123-358-00 | ELECT | 33MF | 20% | 50V |
| C903 | 1-123-341-00 | ELECT | 10MF | 20% | 35V |
| C905 | 1-123-338-00 | ELECT | 2200MF | 20% | 25V |
| C906 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C907 | 1-123-308-00 | ELECT | 220MF | 20% | 10V |
| C908 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C909 | 1-123-312-00 | ELECT | 2200MF | 20% | 10V |
| C911 | 1-123-310-00 | ELECT | 470MF | 20% | 10V |
| C951 | 1-121-657-00 | ELECT | 1000MF | | 25V |
| C952 | 1-121-657-00 | ELECT | 1000MF | | 25V |
| ▲CNP001 | 1-508-878-00 | BASE POST | | | |
| ▲CNP002 | 1-560-060-00 | PIN, CONNECTOR 2P | | | |
| ▲CNP501 | 1-560-063-00 | PIN, CONNECTOR 5P | | | |

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- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

CAPACITORS:

- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

- F : nonflammable

COILS

- MMH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:
 UA.... : μA...., UPA.... : μPA...., UPC.... : μPC,
 UPD.... : μPD....

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

GENERAL SECTION

| No. | Part No. | Description |
|-----|--------------|---|
| 1 | 2-259-121-00 | SCREW, TR |
| 2 | 3-304-418-00 | BUTTON, REC CONTROL |
| 3 | 3-304-419-00 | BUTTON, EJECT |
| 4 | 3-304-423-00 | PLATE, SIDE, LEFT |
| 5 | 3-304-429-00 | PLATE, RELAY |
| 6 | 3-304-422-31 | (US,Canadian)...PLATE, JACK |
| 6 | 3-304-446-11 | (AEP,UK).....PLATE, JACK |
| 6 | 3-304-447-11 | (E).....PLATE, JACK |
| 7 | 3-309-902-00 | BASE (A), CONTROL BUTTON |
| 8 | 3-309-903-00 | BASE (B), CONTROL BUTTON |
| 9 | 3-309-904-00 | BASE, AMS BUTTON |
| 10 | 3-309-905-00 | BASE, CLEAR BUTTON |
| 11 | 3-309-907-00 | BRACKET (LEFT), CONTROL |
| 12 | 3-309-908-00 | BRACKET (RIGHT), CONTROL |
| 13 | 3-309-912-01 | KNOB, PUSH |
| 14 | 3-309-912-11 | KNOB, PUSH |
| 15 | 3-309-914-00 | CASE, SHIELD |
| 16 | 3-309-919-00 | JOINT |
| 17 | 3-309-920-00 | CHASSIS, AMPLIFIER |
| 18 | 3-309-925-00 | (US,Canadian)...LABEL, MODEL NUMBER |
| 18 | 3-309-926-00 | (AEP).....LABEL, MODEL NUMBER |
| 18 | 3-309-927-00 | (G-AEP).....LABEL, MODEL NUMBER |
| 18 | 3-309-928-00 | (UK).....LABEL, MODEL NUMBER |
| 18 | 3-309-929-00 | (E).....LABEL, MODEL NUMBER |
| 19 | 3-534-238-XX | SPRING, TENSION |
| 20 | 3-544-028-01 | SPACER (t=0.3) |
| 21 | 3-544-028-11 | SPACER (t=0.5) |
| 22 | 3-544-028-21 | SPACER (t=1.0) |
| 23 | 3-567-242-00 | HEAT SINK |
| 24 | 3-575-501-00 | SLIDER, EJECT |
| 25 | 3-575-502-00 | BRACKET, EJECT |
| 26 | 3-575-515-00 | KNOB, SLIDE SWITCH |
| 27 | 3-575-524-00 | (US,Canadian)...COVER, POWER SWITCH |
| 28 | 3-575-529-11 | PLATE, SIDE, RIGHT |
| 29 | 3-575-538-00 | PLATE, BOTTOM |
| 30 | 3-575-539-00 | CASE |
| 31 | 3-576-731-00 | FELT (H) |
| 32 | 3-703-037-00 | INSULATOR, TO-220 |
| 33 | 3-701-682-00 | (US,Canadian,E)...STOPPER, CORD |
| 33 | 3-703-244-00 | (AEP,UK).....BUSHING, CORD |
| 34 | 3-703-486-00 | +PTTW 3X5 |
| 35 | 3-703-677-00 | (US,Canadian)..LABEL, CAUTION, MAIN, NEW UL |
| 36 | 3-703-680-00 | (US).....LABEL, CAUTION, SUB, NEW UL |

GENERAL SECTION

| No. | Part No. | Description |
|-----|--------------|--|
| 37 | 3-703-710-01 | STICKER, SONY SYMBOL (12) |
| 38 | 3-831-441-XX | CUSHION |
| 39 | 4-820-330-21 | SCREW, BW, PLUS MINUS |
| 40 | 4-875-455-21 | (AEP,UK,E)...COVER (DIA.20), CAPASITOR |
| 41 | 7-628-253-95 | SCREW +PS 2.6X4 |
| 42 | 7-682-147-20 | SCREW +P 3X6 |
| 43 | 7-682-247-13 | SCREW +K 3X6 |
| 44 | 7-682-546-09 | SCREW +B 3X5 |
| 45 | 7-682-646-01 | SCREW +PS 3X5 |
| 46 | 7-685-104-14 | TOTSU PTPWH 2X6 NON-SLIT, TYPE2 |
| 47 | 7-685-534-19 | SCREW +BTP 2.6X8 TYPE2 N-S |
| 48 | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 SLIT |
| 49 | 7-685-871-01 | SCREW +BVTT 3X6 (S) |
| 50 | 7-685-871-09 | SCREW +BVTT 3X6 (S) |
| 51 | 9-911-837-XX | CUSHION, FILTER |
| 52 | 9-911-846-XX | CUSHION |
| 53 | A-2310-208-A | PANEL ASSY, FRONT |
| 54 | A-2315-022-A | WINDOW ASSY, CASSETTE |
| 55 | X-3304-405-0 | KNOB ASSY, POWER |
| 56 | X-3309-901-1 | PLATE ASSY, ORNAMENTAL |
| 57 | X-3309-903-1 | ESCUTCHEON ASSY |
| 58 | 7-687-204-11 | PTPWH 2X6 |

ACCESSORY & PACKING MATERIAL

| No. | Part No. | Description |
|-----|--------------|-------------------------------------|
| 101 | 1-551-734-11 | CORD, CONNECTION (RK- 74A) |
| 102 | 3-701-630-00 | BAG, POLYETHYLENE |
| 103 | 3-773-166-21 | (US,Canadian)...MANUAL, INSTRUCTION |
| 104 | 3-773-166-41 | (AEP).....MANUAL, INSTRUCTION |
| 105 | 3-773-166-11 | (AEP,UK,E).....MANUAL, INSTRUCTION |
| 106 | 3-793-828-11 | QUESTIONNAIRE |
| 107 | 3-573-625-00 | SHEET, POLYETHYLENE |
| 108 | X-3701-105-0 | ROD ASSY, CLEANING, HEAD |

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CAPACITORS:

- All capacitors are in μF . Common capacitors are omitted. Refer to the following lists for their part numbers.
MF: μF , PF: μF .

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

- F : nonflammable

COILS

- MMH : mH, UH : μH

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SEMICONDUCTORS

In each case, U : μ , for example:
UA....: μA ..., UPA....: μPA ..., UPC....: μPC ,
UPD....: μPD ...

MECHANISM SECTION

| No. | Part No. | Description |
|-----|----------------|---------------------------|
| 301 | 3-481-272-00 | SPRING, COMPRESSION |
| 302 | 3-538-051-00 | RUBBER, BRAKE |
| 303 | 3-555-113-00 | SPRING (RIGHT) |
| 304 | 3-555-114-00 | SPRING (LEFT) |
| 305 | 3-558-708-11 | WASHER, STOPPER |
| 306 | 3-558-708-21 | WASHER, STOPPER |
| 307 | 3-564-027-11 | FELT, LIMITER |
| 308 | 3-564-319-00 | BELT, CAPSTAN |
| 309 | ▲;3-575-302-00 | RETAINER, THRUST |
| 310 | 3-575-304-00 | SHAFT, GEAR, FR |
| 311 | ▲;3-575-307-00 | LEVER, FWD |
| 312 | ▲;3-575-312-00 | SPRING |
| 313 | 3-575-318-00 | LEVER, LOCK, TUNING |
| 314 | 3-575-321-00 | RETAINER, THRUST, CAPSTAN |
| 315 | 3-575-324-00 | GEAR, LIMITER |
| 316 | 3-575-327-00 | STOPPER |
| 317 | 3-575-328-00 | HOLDER, LAMP |
| 318 | 3-575-330-00 | BRACKET, HEAD |
| 319 | ▲;3-575-331-00 | LEVER, DETECTION, HALF |
| 320 | 3-575-332-00 | GEAR, FR |
| 321 | 3-575-333-00 | PISTON |
| 322 | ▲;3-575-334-00 | LEVER, DETECTION, REC |
| 323 | 3-575-345-00 | SPRING |
| 324 | 3-575-348-00 | ROLLER, GUIDE, THREADING |
| 325 | 3-575-350-00 | CLAW, REEL TABLE |
| 326 | 3-575-351-00 | SPRING |
| 327 | 3-575-353-11 | TABLE, REEL |
| 328 | 3-575-354-00 | LEVER, LOCK |
| 329 | 3-575-356-00 | SPRING |
| 330 | 3-575-357-00 | SPRING, TENSION |
| 331 | 3-575-358-00 | SPRING, TENSION |
| 332 | 3-575-359-00 | SPRING, TENSION |
| 333 | 3-575-364-00 | SPRING, TENSION |
| 334 | 3-575-365-00 | SPRING, COMPRESSION |
| 335 | 3-575-368-00 | SPRING, COMPRESSION |
| 336 | | |
| 337 | 3-575-392-00 | RING, PISTON |
| 338 | 3-575-414-00 | SPRING, COMPRESSION |
| 339 | 3-575-415-11 | ARBOR, MOVABLE |
| 340 | 3-575-416-11 | ARBOR, FIXED |
| 341 | 3-575-457-00 | PLATE (B), SHIELD, MOTOR |
| 342 | 3-575-458-00 | SPRING |
| 343 | 3-575-460-00 | LEVER, SELECT TUNE |
| 344 | 3-575-469-00 | SHOE, BRAKE |
| 345 | ▲;3-575-470-00 | LEVER, HOLDER FULCRUM |

MECHANISM SECTION

| No. | Part No. | Description |
|-----|----------------|-------------------------------|
| 346 | 3-575-471-00 | TABLE, ADJUSTMENT, HEAD |
| 347 | 3-575-472-00 | HOLDER, CASSETTE |
| 348 | | |
| 349 | 3-652-612-11 | CUSHION (B) |
| 350 | 3-701-438-21 | WASHER |
| 351 | 3-701-439-21 | WASHER |
| 352 | 3-701-444-11 | WASHER, 6 |
| 353 | 3-703-496-00 | SCREW + PWH2X14 |
| 354 | 7-621-259-15 | SCREW +P 2.6X3 |
| 355 | 7-621-775-10 | SCREW +B 2.6X4 |
| 356 | 7-624-110-04 | STOP RING 6.0, TYPE -E |
| 357 | 7-671-112-11 | BALL, STEEL |
| 358 | 7-682-949-01 | SCREW +PSW 3X10 |
| 359 | 7-685-861-01 | SCREW +BVTT 2.6X5 (S) |
| 360 | 7-687-246-21 | SCREW, TOTSU PTPWH 3X8, TYPE2 |
| 361 | X-3575-303-0 | METAL ASSY, CAPSTAN |
| 362 | X-3575-304-0 | PINCH LEVER (T) ASSY |
| 363 | X-3575-305-0 | FLYWHEEL (T) ASSY |
| 364 | X-3575-310-0 | LEVER ASSY, TENSION, BACK |
| 365 | X-3575-314-0 | PLATE ASSY, ORNAMENTAL |
| 366 | X-3575-324-0 | CHASSIS ASSY, HEAD |
| 367 | X-3575-328-1 | PULLEY, MOTOR |
| 368 | ▲;X-3575-338-0 | PLATE (LEFT) ASSY, FULCRUM |
| 369 | ▲;X-3575-339-0 | PLATE (RIGHT) ASSY, FULCRUM |
| 370 | ▲;X-3575-342-0 | PLATE ASSY, BRAKE |
| 371 | ▲;X-3575-343-0 | CHASSIS ASSY, MECHANISM |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description |
|---------|----------------|---------------------------------|
| 501 | 1-507-761-00 | JACK, PIN 4P |
| 502 | ▲;1-526-576-31 | (E).....SELECTOR, POWER VOLTAGE |
| 503 | ▲;1-535-116-00 | TERMINAL |
| 504 | ▲;1-534-817-XX | (AEP).....CORD, POWER |
| 504 | ▲;1-551-472-00 | (E2).....CORD, POWER |
| 504 | ▲;1-551-628-00 | (US,Canadian)...CORD, POWER |
| 504 | ▲;1-551-884-00 | (UK).....CORD, POWER |
| 504 | ▲;1-555-734-00 | (E1).....CORD, POWER |
| 506 | 1-561-598-00 | SOCKET 4P |
| 507 | ▲;1-603-823-00 | PC BOARD, PHOTO |
| 508 | ▲;1-606-086-00 | PC BOARD, SWITCH |
| 509 | ▲;1-606-824-00 | PC BOARD, SYSTEM CONTROL |
| 510 | ▲;1-606-825-00 | PC BOARD, TIMER SW |
| 511 | ▲;1-606-826-00 | PC BOARD, TRANSISTOR (A) |

NOTE:

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- Items marked "▲" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

CAPACITORS:

- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers.
- MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

- F : nonflammable

COILS

- MMH : mH, UH : μH

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SEMICONDUCTORS

In each case, U : μ, for example:
 UA....: μA...., UPA....: μPA...., UPC....: μPC,
 UPD....: μPD....

ELECTRICAL PARTS

| Ref.No. | Part No. | Description |
|---------|---------------------|---------------------------------------|
| ▲ | CNP502;1-560-064-00 | PIN, CONNECTOR 6P |
| ▲ | CNP503;1-560-338-00 | PIN, CONNECTOR 7P |
| ▲ | CNP504;1-560-066-00 | PIN, CONNECTOR 10P |
| ▲ | CNP505;1-560-062-00 | PIN, CONNECTOR 4P |
| ▲ | CNP506;1-560-063-00 | PIN, CONNECTOR 5P |
| ▲ | CNP507;1-560-065-00 | PIN, CONNECTOR 8P |
| ▲ | CNP509;1-560-063-00 | PIN, CONNECTOR 5P |
| ▲ | CNP510;1-560-338-00 | PIN, CONNECTOR 7P |
| ▲ | CNP511;1-560-064-00 | PIN, CONNECTOR 6P |
| ▲ | CNP701;1-560-070-00 | BASE POST |
| CP001 | 1-464-110-00 | OSCILLATOR UNIT, BIAS |
| CP901A | 1-161-744-00 | (AEP,UK,E).....CAP, CERAMIC 10000PF |
| CP901A | 1-161-749-00 | (US,Canadian)....CAP, CERAMIC 10000PF |
| CT001 | 1-141-225-00 | CAP, TUNING, TRIMAR |
| D001 | 8-719-910-64 | DIODE HZ6B1L |
| D002 | 8-719-910-64 | DIODE HZ6B1L |
| D003 | 8-719-910-74 | DIODE HZ7B1L |
| D004 | 8-719-815-55 | DIODE 1S1555 |
| D005 | 8-719-815-55 | DIODE 1S1555 |
| D008 | 8-719-815-55 | DIODE 1S1555 |
| D501 | 8-719-200-02 | DIODE 10E-2 |
| D502 | 8-719-815-55 | DIODE 1S1555 |
| D503 | 8-719-934-05 | DIODE SLR-34URC5 |
| D504 | 8-719-902-77 | DIODE SLR-34PC5 |
| D505 | 8-719-902-78 | DIODE SLR-34DC5 |
| D506 | 8-719-815-55 | DIODE 1S1555 |
| D507 | 8-719-815-55 | DIODE 1S1555 |
| D508 | 8-719-815-55 | DIODE 1S1555 |
| D509 | 8-719-815-55 | DIODE 1S1555 |
| D510 | 8-719-815-55 | DIODE 1S1555 |
| D511 | 8-719-815-55 | DIODE 1S1555 |
| D512 | 8-719-815-55 | DIODE 1S1555 |
| D513 | 8-719-815-55 | DIODE 1S1555 |
| D514 | 8-719-815-55 | DIODE 1S1555 |
| D515 | 8-719-815-55 | DIODE 1S1555 |
| D601 | 8-719-815-55 | DIODE 1S1555 |
| D701 | 8-719-815-55 | DIODE 1S1555 |
| D702 | 8-719-910-01 | DIODE HZ20-1L |
| D703 | 8-719-815-55 | DIODE 1S1555 |
| D704 | 8-719-815-55 | DIODE 1S1555 |
| D705 | 8-719-815-55 | DIODE 1S1555 |
| D706 | 8-719-815-55 | DIODE 1S1555 |
| D707 | 8-719-815-55 | DIODE 1S1555 |
| D708 | 8-719-317-10 | DIODE SEL1710K |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description |
|---------|----------------|-----------------------------|
| D709 | 8-719-317-10 | DIODE SEL1710K |
| D801 | 8-719-200-02 | DIODE 10E-2 |
| D802 | 8-719-200-02 | DIODE 10E-2 |
| D803 | 8-719-200-02 | DIODE 10E-2 |
| D804 | 8-719-200-02 | DIODE 10E-2 |
| D901 | ▲ 8-719-200-02 | DIODE 10E-2 |
| D902 | ▲ 8-719-200-02 | DIODE 10E-2 |
| D903 | ▲ 8-719-200-02 | DIODE 10E-2 |
| D904 | ▲ 8-719-200-02 | DIODE 10E-2 |
| D905 | 8-719-200-02 | DIODE 10E-2 |
| D906 | 8-719-922-71 | DIODE HZ27-1L |
| D907 | 8-719-910-14 | DIODE HZ11B1L |
| D908 | 8-719-910-69 | DIODE HZ6C3L |
| D909 | ▲ 8-719-931-07 | DIODE EQB01-07 |
| D951 | ▲ 8-719-200-02 | DIODE 10E-2 |
| D952 | ▲ 8-719-200-02 | DIODE 10E-2 |
| D953 | ▲ 8-719-200-02 | DIODE 10E-2 |
| D954 | ▲ 8-719-200-02 | DIODE 10E-2 |
| FL701 | 1-519-248-00 | INDICATOR TUBE, FLUORESCENT |
| HE001 | 8-825-724-00 | HEAD, ERASE EF-201-36 |
| HRP101 | 8-825-529-20 | HEAD, REC/PB |
| IC001 | 8-759-700-05 | IC NJM2043S-D |
| IC002 | 8-759-961-38 | IC 8A6138 |
| IC004 | 8-759-600-02 | IC M5218L |
| IC301 | 8-759-300-76 | IC CX-174A-2 |
| IC302 | 8-759-300-76 | IC CX-174A-2 |
| IC401 | 8-759-300-76 | IC CX-174A-2 |
| IC402 | 8-759-300-76 | IC CX-174A-2 |
| IC501 | 8-759-900-80 | IC MB8843-590K |
| IC502 | 8-759-900-81 | IC MB8843-594J |
| IC503 | 8-759-984-49 | IC MB84049UB |
| IC504 | 8-759-220-04 | IC TC40H004P |
| IC505 | 8-759-133-90 | IC UPC339C |
| IC506 | 8-759-729-03 | IC NJM2903D |
| IC507 | 8-759-984-69 | IC MB84069UB |
| IC701 | 8-759-904-72 | IC MSL9359RS |
| J002 | 1-507-796-21 | JACK |
| J101 | 1-507-797-21 | JACK, LARGE TYPE |
| J201 | 1-507-797-21 | JACK, LARGE TYPE |
| L001 | 1-407-177-XX | MICRO INDUCTOR 470UH |
| L002 | 1-407-177-XX | MICRO INDUCTOR 470UH |
| L101 | 1-408-262-00 | MICRO INDUCTOR 27MMH |
| L201 | 1-408-262-00 | MICRO INDUCTOR 27MMH |
| L301 | 1-408-259-00 | MICRO INDUCTOR 15MMH |
| L401 | 1-408-259-00 | MICRO INDUCTOR 15MMH |

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CAPACITORS:

- All capacitors are in μF . Common capacitors are omitted. Refer to the following lists for their part numbers.
- MF: μF , PF: $\mu\mu\text{F}$.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

- F : nonflammable

COILS

- MMH : mH, UH : μH

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SEMICONDUCTORS

In each case, U : μ , for example:

UA.... : μA ..., UPA.... : μPA ..., UPC.... : μPC ,
UPD.... : μPD ...

ELECTRICAL PARTS

| Ref.No. | Part No. | Description |
|---------|--------------|--------------------------|
| LPF101 | 1-231-388-00 | FILTER, LOWPASS |
| LPF101 | 1-231-388-00 | FILTER, LOWPASS |
| LPF201 | 1-231-388-00 | FILTER, LOWPASS |
| LPF201 | 1-231-388-00 | FILTER, LOWPASS |
| M801 | 8-835-049-01 | MOTOR, DC (DNE-4100A) |
| M802 | X-3575-348-0 | MOTOR ASSY, REEL |
| PM801 | 1-454-301-00 | SOLENOID, PLUNGER (HEAD) |
| PM802 | 1-454-291-00 | SOLENOID, PLUNGER (AMS) |
| PL801 | 1-518-340-71 | LAMP, PILOT |
| Q001 | 8-769-112-00 | TRANSISTOR 2SK120 |
| Q002 | 8-769-112-00 | TRANSISTOR 2SK120 |
| Q003 | 8-729-141-43 | TRANSISTOR 2SD414 |
| Q004 | 8-729-315-22 | TRANSISTOR 2SD1152 |
| Q005 | 8-729-315-22 | TRANSISTOR 2SD1152 |
| Q006 | 8-729-154-83 | TRANSISTOR 2SB548 |
| Q007 | 8-729-384-48 | TRANSISTOR 2SA844 |
| Q008 | 8-729-384-48 | TRANSISTOR 2SA844 |
| Q010 | 8-729-384-48 | TRANSISTOR 2SA844 |
| Q011 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q012 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q013 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q101 | 8-729-334-58 | TRANSISTOR 2SC1345 |
| Q102 | 8-729-334-58 | TRANSISTOR 2SC1345 |
| Q103 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q104 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q201 | 8-729-334-58 | TRANSISTOR 2SC1345 |
| Q202 | 8-729-334-58 | TRANSISTOR 2SC1345 |
| Q203 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q204 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q301 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q302 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q303 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q304 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q305 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q306 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q307 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q308 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q309 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q310 | 8-729-100-13 | TRANSISTOR 2SC2001 |
| Q311 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q401 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q402 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q403 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q404 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q405 | 8-729-663-47 | TRANSISTOR 2SC1364 |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description |
|---------|--------------|----------------------|
| Q406 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q407 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q408 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q409 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q410 | 8-729-100-13 | TRANSISTOR 2SC2001 |
| Q411 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q501 | 8-729-177-43 | TRANSISTOR 2SD774 |
| Q502 | 8-729-177-43 | TRANSISTOR 2SD774 |
| Q503 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q504 | 8-729-103-43 | TRANSISTOR 2SB734-4 |
| Q505 | 8-729-664-47 | TRANSISTOR 2SC1364 |
| Q506 | 8-729-103-43 | TRANSISTOR 2SB734-4 |
| Q507 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q508 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q509 | 8-729-100-13 | TRANSISTOR 2SC2001 |
| Q510 | 8-729-195-23 | TRANSISTOR 2SA952 |
| Q511 | 8-729-195-23 | TRANSISTOR 2SA952 |
| Q512 | 8-729-100-13 | TRANSISTOR 2SC2001 |
| Q513 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q514 | 8-729-180-93 | TRANSISTOR 2SD809 |
| Q601 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q602 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q603 | 8-729-663-47 | TRANSISTOR 2SC1364 |
| Q604 | 8-729-602-68 | TRANSISTOR 2SA1026-8 |
| Q701 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q702 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q703 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q704 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q705 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q706 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q707 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q708 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q709 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q710 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q711 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q712 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q713 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q714 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q715 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q716 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q717 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q718 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q719 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q720 | 8-729-612-77 | TRANSISTOR 2SA1027R |
| Q721 | 8-729-612-77 | TRANSISTOR 2SA1027R |

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CAPACITORS:

- All capacitors are in μF . Common capacitors are omitted. Refer to the following lists for their part numbers.

MF: μF , PF: μpF .

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

- F: nonflammable

COILS

- MMH: mH, UH: μH

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SEMICONDUCTORS

In each case, U: μ , for example:

UA....: μA ..., UPA....: μPA ..., UPC....: μPC ,
UPD....: μPD ...

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|--------------|---------------------|------|----|--------|
| Q722 | 8-729-612-77 | TRANSISTOR 2SA1027R | | | |
| Q803 | 8-729-110-21 | TRANSISTOR PH102 | | | |
| Q804 | 8-729-110-21 | TRANSISTOR PH102 | | | |
| Q901 | 8-729-288-02 | TRANSISTOR 2SD880 | | | |
| Q902 | 8-729-663-47 | TRANSISTOR 2SC1364 | | | |
| Q903 | 8-729-663-47 | TRANSISTOR 2SC1364 | | | |
| Q904 | 8-729-288-02 | TRANSISTOR 2SD880 | | | |
| Q905 | 8-729-663-47 | TRANSISTOR 2SC1364 | | | |
| Q907 | 8-729-663-47 | TRANSISTOR 2SC1364 | | | |
| R003 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R004 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R005 | 1-246-469-00 | CARBON | 680 | 5% | 1/4W |
| R006 | 1-246-474-00 | CARBON | 1.1K | 5% | 1/4W |
| R007 | 1-246-474-00 | CARBON | 1.1K | 5% | 1/4W |
| R008 | 1-246-469-00 | CARBON | 680 | 5% | 1/4W |
| R010 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W |
| R011 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W |
| R012 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W |
| R014 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W |
| R015 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W |
| R016 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W |
| R017 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W |
| R018 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W |
| R020 | 1-246-468-00 | CARBON | 620 | 5% | 1/4W |
| R021 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W |
| R022 | 1-246-498-00 | CARBON | 11K | 5% | 1/4W |
| R023 | 1-246-509-00 | CARBON | 33K | 5% | 1/4W |
| R024 | 1-246-477-00 | CARBON | 1.5K | 5% | 1/4W |
| R025 | 1-246-498-00 | CARBON | 11K | 5% | 1/4W |
| R026 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R027 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W |
| R028 | 1-247-847-00 | CARBON | 4.7K | 5% | 1/6W |
| R029 | 1-247-867-00 | CARBON | 33K | 5% | 1/6W |
| R030 | 1-247-807-00 | CARBON | 100 | 5% | 1/6W |
| R031 | 1-247-867-00 | CARBON | 33K | 5% | 1/6W |
| R032 | 1-246-487-00 | CARBON | 3.9K | 5% | 1/4W |
| R033 | 1-247-871-00 | CARBON | 47K | 5% | 1/6W |
| R034 | 1-247-871-00 | CARBON | 47K | 5% | 1/6W |
| R035 | 1-246-457-00 | CARBON | 220 | 5% | 1/4W |
| R036 | 1-246-457-00 | CARBON | 220 | 5% | 1/4W |
| R037 | 1-212-857-00 | FUSIBLE | 10 | 5% | 1/4W F |
| R038 | 1-212-857-00 | FUSIBLE | 10 | 5% | 1/4W F |
| R101 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R102 | 1-246-518-00 | CARBON | 75K | 5% | 1/4W |
| R103 | 1-246-535-00 | CARBON | 390K | 5% | 1/4W |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|--------------|-------------|------|----|------|
| R104 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R105 | 1-246-441-00 | CARBON | 47 | 5% | 1/4W |
| R106 | 1-246-529-00 | CARBON | 220K | 5% | 1/4W |
| R107 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R108 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R109 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R110 | 1-246-529-00 | CARBON | 220K | 5% | 1/4W |
| R111 | 1-246-489-00 | CARBON | 4.7K | 5% | 1/4W |
| R112 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R113 | 1-246-485-00 | CARBON | 3.3K | 5% | 1/4W |
| R114 | 1-246-521-00 | CARBON | 100K | 5% | 1/4W |
| R115 | 1-246-495-00 | CARBON | 8.2K | 5% | 1/4W |
| R116 | 1-244-909-00 | CARBON | 33K | 5% | 1/2W |
| R117 | 1-244-881-00 | CARBON | 2.2K | 5% | 1/2W |
| R118 | 1-246-501-00 | CARBON | 15K | 5% | 1/4W |
| R119 | 1-246-479-00 | CARBON | 1.8K | 5% | 1/4W |
| R120 | 1-246-508-00 | CARBON | 30K | 5% | 1/4W |
| R121 | 1-246-509-00 | CARBON | 33K | 5% | 1/4W |
| R122 | 1-246-493-00 | CARBON | 6.8K | 5% | 1/4W |
| R123 | 1-246-504-00 | CARBON | 20K | 5% | 1/4W |
| R124 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R125 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R126 | 1-246-515-00 | CARBON | 56K | 5% | 1/4W |
| R128 | 1-246-499-00 | CARBON | 12K | 5% | 1/4W |
| R129 | 1-247-891-00 | CARBON | 330K | 5% | 1/6W |
| R130 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W |
| R132 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R133 | 1-246-509-00 | CARBON | 33K | 5% | 1/4W |
| R134 | 1-246-508-00 | CARBON | 30K | 5% | 1/4W |
| R135 | 1-246-457-00 | CARBON | 220 | 5% | 1/4W |
| R136 | 1-246-506-00 | CARBON | 24K | 5% | 1/4W |
| R137 | 1-246-451-00 | CARBON | 120 | 5% | 1/4W |
| R138 | 1-244-890-00 | CARBON | 5.1K | 5% | 1/2W |
| R139 | 1-246-524-00 | CARBON | 130K | 5% | 1/4W |
| R140 | 1-246-485-00 | CARBON | 3.3K | 5% | 1/4W |
| R141 | 1-244-899-00 | CARBON | 12K | 5% | 1/2W |
| R142 | 1-246-529-00 | CARBON | 220K | 5% | 1/4W |
| R143 | 1-246-503-00 | CARBON | 18K | 5% | 1/4W |
| R144 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R145 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W |
| R146 | 1-246-528-00 | CARBON | 200K | 5% | 1/4W |
| R147 | 1-246-503-00 | CARBON | 18K | 5% | 1/4W |
| R148 | 1-246-503-00 | CARBON | 18K | 5% | 1/4W |
| R149 | 1-246-493-00 | CARBON | 6.8K | 5% | 1/4W |
| R150 | 1-246-521-00 | CARBON | 100K | 5% | 1/4W |

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- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

CAPACITORS:

- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers.

MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

- F : nonflammable

COILS

- MMH : mH, UH : μH

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SEMICONDUCTORS

In each case, U : μ, for example:
 UA.... : μA...., UPA.... : μPA...., UPC.... : μPC,
 UPD.... : μPD....

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|--------------|-------------|------|----|------|
| R151 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R152 | 1-246-513-00 | CARBON | 47K | 5% | 1/4W |
| R153 | 1-246-513-00 | CARBON | 47K | 5% | 1/4W |
| R154 | 1-247-887-00 | CARBON | 220K | 5% | 1/6W |
| R155 | 1-246-515-00 | CARBON | 56K | 5% | 1/4W |
| R301 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W |
| R302 | 1-246-545-00 | CARBON | 1M | 5% | 1/4W |
| R303 | 1-246-530-00 | CARBON | 240K | 5% | 1/4W |
| R304 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W |
| R305 | 1-246-545-00 | CARBON | 1M | 5% | 1/4W |
| R306 | 1-246-501-00 | CARBON | 15K | 5% | 1/4W |
| R307 | 1-246-530-00 | CARBON | 240K | 5% | 1/4W |
| R308 | 1-246-507-00 | CARBON | 27K | 5% | 1/4W |
| R309 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W |
| R310 | 1-246-499-00 | CARBON | 12K | 5% | 1/4W |
| R311 | 1-246-545-00 | CARBON | 1M | 5% | 1/4W |
| R312 | 1-246-528-00 | CARBON | 200K | 5% | 1/4W |
| R313 | 1-246-436-00 | CARBON | 30 | 5% | 1/4W |
| R314 | 1-246-445-00 | CARBON | 68 | 5% | 1/4W |
| R315 | 1-246-502-00 | CARBON | 16K | 5% | 1/4W |
| R316 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R317 | 1-247-838-00 | CARBON | 2K | 5% | 1/6W |
| R318 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W |
| R319 | 1-246-492-00 | CARBON | 6.2K | 5% | 1/4W |
| R320 | 1-246-508-00 | CARBON | 30K | 5% | 1/4W |
| R321 | 1-246-509-00 | CARBON | 33K | 5% | 1/4W |
| R322 | 1-247-871-00 | CARBON | 47K | 5% | 1/6W |
| R323 | 1-246-545-00 | CARBON | 1M | 5% | 1/4W |
| R324 | 1-246-453-00 | CARBON | 150 | 5% | 1/4W |
| R325 | 1-246-455-00 | CARBON | 180 | 5% | 1/4W |
| R326 | 1-246-475-00 | CARBON | 1.2K | 5% | 1/4W |
| R327 | 1-246-459-00 | CARBON | 270 | 5% | 1/4W |
| R328 | 1-246-533-00 | CARBON | 330K | 5% | 1/4W |
| R329 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R330 | 1-246-485-00 | CARBON | 3.3K | 5% | 1/4W |
| R331 | 1-246-529-00 | CARBON | 220K | 5% | 1/4W |
| R332 | 1-246-530-00 | CARBON | 240K | 5% | 1/4W |
| R333 | 1-246-530-00 | CARBON | 240K | 5% | 1/4W |
| R334 | 1-246-463-00 | CARBON | 390 | 5% | 1/4W |
| R335 | 1-246-513-00 | CARBON | 47K | 5% | 1/4W |
| R336 | 1-214-966-00 | METAL | 1.2M | 1% | 1/4W |
| R337 | 1-247-848-00 | CARBON | 5.1K | 5% | 1/6W |
| R338 | 1-246-467-00 | CARBON | 560 | 5% | 1/4W |
| R339 | 1-246-475-00 | CARBON | 1.2K | 5% | 1/4W |
| R340 | 1-246-502-00 | CARBON | 16K | 5% | 1/4W |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|--------------|-------------|------|----|------|
| R341 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R342 | 1-246-510-00 | CARBON | 36K | 5% | 1/4W |
| R343 | 1-246-477-00 | CARBON | 1.5K | 5% | 1/4W |
| R344 | 1-246-490-00 | CARBON | 5.1K | 5% | 1/4W |
| R345 | 1-246-484-00 | CARBON | 3K | 5% | 1/4W |
| R346 | 1-246-533-00 | CARBON | 330K | 5% | 1/4W |
| R347 | 1-246-513-00 | CARBON | 47K | 5% | 1/4W |
| R348 | 1-246-457-00 | CARBON | 220 | 5% | 1/4W |
| R349 | 1-246-472-00 | CARBON | 910 | 5% | 1/4W |
| R350 | 1-246-485-00 | CARBON | 3.3K | 5% | 1/4W |
| R351 | 1-246-481-00 | CARBON | 2.2K | 5% | 1/4W |
| R352 | 1-246-507-00 | CARBON | 27K | 5% | 1/4W |
| R353 | 1-246-493-00 | CARBON | 6.8K | 5% | 1/4W |
| R354 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R355 | 1-246-529-00 | CARBON | 220K | 5% | 1/4W |
| R356 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R357 | 1-247-845-00 | CARBON | 3.9K | 5% | 1/6W |
| R358 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R359 | 1-247-869-00 | CARBON | 39K | 5% | 1/6W |
| R436 | 1-214-966-00 | METAL | 1.2M | 1% | 1/4W |
| R501 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R502 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R503 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R504 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R505 | 1-206-477-00 | METAL OXIDE | 39 | 5% | 2W F |
| R506 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R507 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R508 | 1-206-482-00 | METAL OXIDE | 62 | 5% | 2W F |
| R509 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R510 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R511 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R512 | 1-246-481-00 | CARBON | 2.2K | 5% | 1/4W |
| R513 | 1-246-449-00 | CARBON | 100 | 5% | 1/4W |
| R514 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R515 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R516 | 1-246-449-00 | CARBON | 100 | 5% | 1/4W |
| R517 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R518 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R519 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R520 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R521 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R522 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R523 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R524 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R525 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |

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- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

CAPACITORS:

- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers.
- MF: μF, PF: μμF.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

- F : nonflammable

COILS

- MMH : mH, UH : μH

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SEMICONDUCTORS

In each case, U : μ, for example:
 UA...: μA..., UPA...: μPA..., UPC...: μPC,
 UPD...: μPD...

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|--------------|-------------|------|----|--------|
| R526 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R527 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R528 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R529 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R531 | 1-246-464-00 | CARBON | 430 | 5% | 1/4W |
| R532 | 1-212-849-00 | FUSIBLE | 4.7 | 5% | 1/4W F |
| R533 | 1-246-468-00 | CARBON | 620 | 5% | 1/4W |
| R534 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R535 | 1-246-457-00 | CARBON | 220 | 5% | 1/4W |
| R536 | 1-246-465-00 | CARBON | 470 | 5% | 1/4W |
| R537 | 1-246-457-00 | CARBON | 220 | 5% | 1/4W |
| R538 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R539 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R540 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R541 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R542 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R543 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R544 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R545 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R546 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R547 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R548 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R549 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R550 | 1-246-504-00 | CARBON | 20K | 5% | 1/4W |
| R551 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R552 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R553 | 1-246-481-00 | CARBON | 2.2K | 5% | 1/4W |
| R554 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R555 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R556 | 1-246-516-00 | CARBON | 62K | 5% | 1/4W |
| R557 | 1-246-477-00 | CARBON | 1.5K | 5% | 1/4W |
| R558 | 1-246-524-00 | CARBON | 130K | 5% | 1/4W |
| R559 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R560 | 1-246-531-00 | CARBON | 270K | 5% | 1/4W |
| R561 | 1-246-466-00 | CARBON | 510 | 5% | 1/4W |
| R562 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R563 | 1-246-509-00 | CARBON | 33K | 5% | 1/4W |
| R564 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R565 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R566 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R567 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| R568 | 1-246-489-00 | CARBON | 4.7K | 5% | 1/4W |
| R569 | 1-246-510-00 | CARBON | 36K | 5% | 1/4W |
| R570 | 1-246-517-00 | CARBON | 68K | 5% | 1/4W |
| R571 | 1-246-499-00 | CARBON | 12K | 5% | 1/4W |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|--------------|-------------|------|----|------|
| R572 | 1-246-511-00 | CARBON | 39K | 5% | 1/4W |
| R573 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R574 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R575 | 1-246-545-00 | CARBON | 1M | 5% | 1/4W |
| R576 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R577 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R578 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R579 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R580 | 1-246-541-00 | CARBON | 680K | 5% | 1/4W |
| R581 | 1-246-521-00 | CARBON | 100K | 5% | 1/4W |
| R582 | 1-246-531-00 | CARBON | 270K | 5% | 1/4W |
| R583 | 1-246-513-00 | CARBON | 47K | 5% | 1/4W |
| R584 | 1-246-531-00 | CARBON | 270K | 5% | 1/4W |
| R585 | 1-246-513-00 | CARBON | 47K | 5% | 1/4W |
| R586 | 1-246-519-00 | CARBON | 82K | 5% | 1/4W |
| R587 | 1-246-477-00 | CARBON | 1.5K | 5% | 1/4W |
| R588 | 1-246-471-00 | CARBON | 820 | 5% | 1/4W |
| R589 | 1-246-471-00 | CARBON | 820 | 5% | 1/4W |
| R590 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R591 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R601 | 1-246-513-00 | CARBON | 47K | 5% | 1/4W |
| R602 | 1-246-513-00 | CARBON | 47K | 5% | 1/4W |
| R603 | 1-246-485-00 | CARBON | 3.3K | 5% | 1/4W |
| R604 | 1-244-906-00 | CARBON | 24K | 5% | 1/2W |
| R605 | 1-244-906-00 | CARBON | 24K | 5% | 1/2W |
| R606 | 1-244-925-00 | CARBON | 150K | 5% | 1/2W |
| R607 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R608 | 1-246-496-00 | CARBON | 9.1K | 5% | 1/4W |
| R609 | 1-246-519-00 | CARBON | 82K | 5% | 1/4W |
| R610 | 1-246-465-00 | CARBON | 470 | 5% | 1/4W |
| R611 | 1-246-529-00 | CARBON | 220K | 5% | 1/4W |
| R612 | 1-246-529-00 | CARBON | 220K | 5% | 1/4W |
| R613 | 1-246-489-00 | CARBON | 4.7K | 5% | 1/4W |
| R614 | 1-246-469-00 | CARBON | 680 | 5% | 1/4W |
| R615 | 1-246-505-00 | CARBON | 22K | 5% | 1/4W |
| R616 | 1-246-531-00 | CARBON | 270K | 5% | 1/4W |
| R617 | 1-246-489-00 | CARBON | 4.7K | 5% | 1/4W |
| R618 | 1-246-510-00 | CARBON | 36K | 5% | 1/4W |
| R619 | 1-246-510-00 | CARBON | 36K | 5% | 1/4W |
| R701 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R702 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R703 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R704 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R705 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R706 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |

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CAPACITORS:

- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers.
- MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

- F : nonflammable

COILS

- MMH : mH, UH : μH

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SEMICONDUCTORS

In each case, U : μ, for example:

UA...: μA..., UP...: μPA..., UPC...: μPC, UPD...: μPD...

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|--------------|-------------|------|----|--------|
| R707 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R708 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R709 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R710 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R711 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R712 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R713 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R714 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R715 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R716 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R717 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R718 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R719 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R720 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R721 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R722 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R723 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R724 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R725 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R726 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R727 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R728 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R729 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R730 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R731 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R732 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R733 | 1-244-861-00 | CARBON | 330 | 5% | 1/2W |
| R734 | 1-247-895-00 | CARBON | 470K | 5% | 1/6W |
| R735 | 1-247-872-00 | CARBON | 51K | 5% | 1/6W |
| R736 | 1-247-872-00 | CARBON | 51K | 5% | 1/6W |
| R737 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W |
| R738 | 1-247-867-00 | CARBON | 33K | 5% | 1/6W |
| R739 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R740 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R741 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R742 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R743 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R744 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R745 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R746 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R747 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R748 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R749 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R750 | 1-247-875-00 | CARBON | 68K | 5% | 1/6W |
| R901 | 1-217-395-00 | FUSIBLE | 47 | 5% | 1/4W F |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---------|--------------|--|---------|----|--------|
| R902 | 1-246-489-00 | CARBON | 4.7K | 5% | 1/4W |
| R903 | 1-244-863-00 | CARBON | 390 | 5% | 1/2W |
| R904 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R905 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W |
| R906 | 1-246-489-00 | CARBON | 4.7K | 5% | 1/4W |
| R907 | 1-213-063-00 | FUSIBLE | 13 | 5% | 1W F |
| R908 | 1-244-853-00 | CARBON | 150 | 5% | 1/2W |
| R909 | 1-212-966-00 | FUSIBLE | 22 | 5% | 1/2W F |
| R910 | 1-246-497-00 | CARBON | 10K | 5% | 1/4W |
| RV101 | 1-226-991-00 | RES, VAR, SLIDE | 20K/20K | | |
| RV102 | 1-226-236-00 | RES, ADJ, CARBON | 10K | | |
| RV103 | 1-226-236-00 | RES, ADJ, CARBON | 10K | | |
| RV201 | 1-226-991-00 | RES, VAR, SLIDE | 20K/20K | | |
| RV202 | 1-226-236-00 | RES, ADJ, CARBON | 10K | | |
| RV203 | 1-226-236-00 | RES, ADJ, CARBON | 10K | | |
| RV301 | 1-226-237-00 | RES, ADJ, CARBON | 20K | | |
| RV401 | 1-226-237-00 | RES, ADJ, CARBON | 20K | | |
| RY001 | 1-515-473-00 | RELAY | | | |
| S005 | 1-553-992-00 | SWITCH, PUSH (3 KEY) | | | |
| S006 | 1-553-992-00 | SWITCH, PUSH (3 KEY) | | | |
| S1 | 1-553-993-00 | SWITCH, PUSH (4 KEY) | | | |
| S2 | 1-553-993-00 | SWITCH, PUSH (4 KEY) | | | |
| S3 | 1-553-993-00 | SWITCH, PUSH (4 KEY) | | | |
| S4 | 1-553-993-00 | SWITCH, PUSH (4 KEY) | | | |
| S501 | 1-554-303-00 | SWITCH, KEY BOARD | | | |
| S502 | 1-554-303-00 | SWITCH, KEY BOARD | | | |
| S503 | 1-554-303-00 | SWITCH, KEY BOARD | | | |
| S504 | 1-554-303-00 | SWITCH, KEY BOARD | | | |
| S505 | 1-554-303-00 | SWITCH, KEY BOARD | | | |
| S506 | 1-554-303-00 | SWITCH, KEY BOARD | | | |
| S507 | 1-554-303-00 | SWITCH, KEY BOARD | | | |
| S508 | 1-553-206-00 | SWITCH, SLIDE | | | |
| S509 | 1-554-303-00 | SWITCH, KEY BOARD | | | |
| S510 | 1-554-303-00 | SWITCH, KEY BOARD | | | |
| S511 | 1-554-303-00 | SWITCH, KEY BOARD | | | |
| S512 | 1-554-303-00 | SWITCH, KEY BOARD | | | |
| S801 | 1-552-532-00 | SWITCH, PUSH | | | |
| S802 | 1-552-532-00 | SWITCH, PUSH | | | |
| S901 | 1-553-318-00 | (AEP,UK,E).....SWITCH, PUSH (AC POWER) | | | |
| S901 | 1-553-319-00 | (US,Canadian)....SWITCH, PUSH (AC POWER) | | | |
| T901 | 1-447-273-00 | (US,Canadian)....TRANSFORMER, POWER | | | |
| T901 | 1-447-274-00 | (E).....TRANSFORMER, POWER | | | |
| T901 | 1-447-275-00 | (AEP,UK).....TRANSFORMER, POWER | | | |
| X501 | 1-527-802-21 | OSCILLATOR, CERAMIC | | | |

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

CAPACITORS:

- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers.
- MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

- F : nonflammable

COILS

- MMH : mH, UH : μH

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

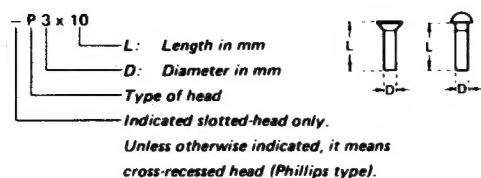
Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SEMICONDUCTORS

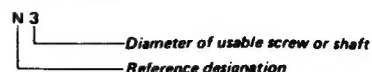
In each case, U : μ, for example:
 UA....: μA...., UPA....: μPA...., UPC....: μPC,
 UPD....: μPD....













HARDWARE NOMENCLATURE














Screw:



Nut, Washer, Retaining ring:



| Reference Designation | Shape | Description | Remarks |
|-----------------------|---|---|--|
| SCREWS | | | |
| P |  | pan-head screw | binding-head (B) screw for replacement |
| PWH |  | pan-head screw with washer face | binding-head (B) screw and flat washer for replacement |
| PS PSP |  | pan-head screw with spring washer | binding-head (B) screw and spring washer for replacement |
| PSW PSPW |  | pan-head screw with spring and flat washers | binding-head (B) screw and spring and flat washers for replacement |
| R |  | round-head screw | binding-head (B) screw for replacement |
| K |  | flat-countersunk-head screw | |
| RK |  | oval-countersunk-head screw | |
| B |  | binding-head screw | |
| T |  | truss-head screw | binding-head (B) screw for replacement |
| F |  | flat-fillister-head screw | |
| RF |  | fillister-head screw | |
| BV |  | brazier-head screw | |

| Reference Designation | Shape | Description | Remarks |
|----------------------------|--|--|---|
| SELF-TAPPING SCREWS | | | |
| TA |  | self-tapping screw | ex: TA, P 3 x 10 |
| PTP |  | pan-head self-tapping screw | binding-head self-tapping (TA, B) screw for replacement |
| PTPWH |  | pan-head self-tapping screw with washer face | binding-head self-tapping (TA, B) screw and flat washer for replacement |
| PTTWH |  | pan-head thread-rolling screw with washer face | binding-head (B) screw and flat washer for replacement |
| SET SCREWS | | | |
| SC |  | set screw | |
| SC |  | hexagon-socket set screw | ex: SC 2.6 x 4, hexagon socket |
| NUT | | | |
| N |  | nut | |
| WASHERS | | | |
| W |  | flat washer | |
| SW |  | spring washer | |
| LW |  | internal-tooth lock washer | ex: LW3, internal |
| LW |  | external-tooth lock washer | ex: LW3, external |
| RETAINING RINGS | | | |
| E |  | retaining ring | |
| G |  | grip-type retaining ring | |